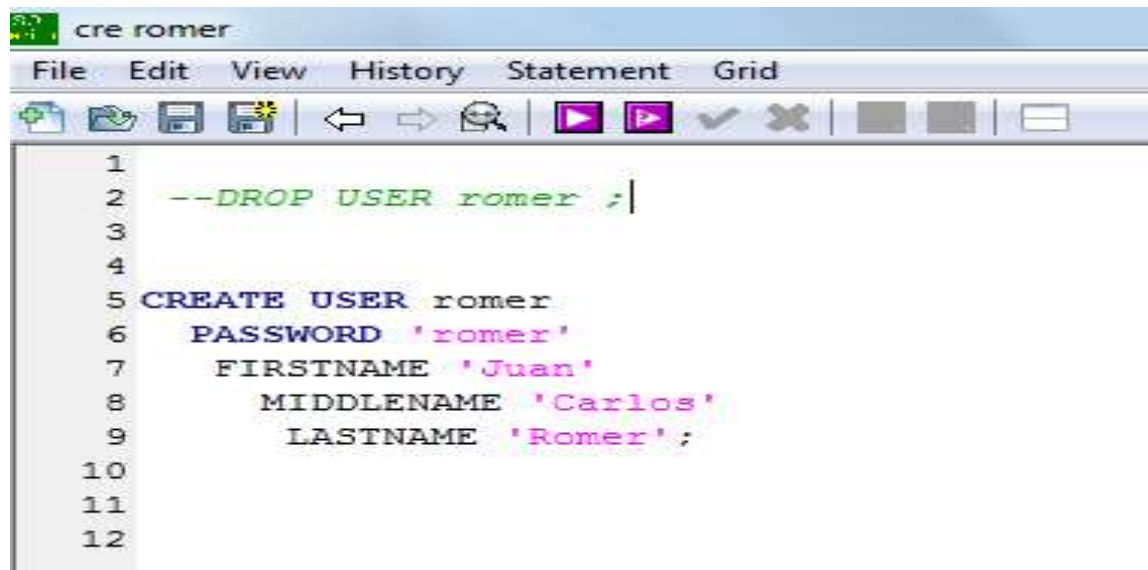


Usuarios y Permisos

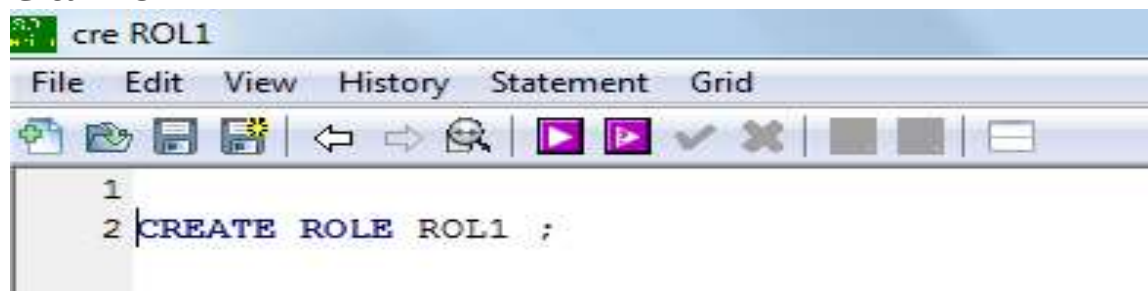
1.- Implementación del objeto Generator para autoincrementar el ID de la tabla CLIENTE

Crear Usuario para la base de datos del ejercicio Implementación del ID de la tabla CLIENTE AUTOINCREMENTAL.



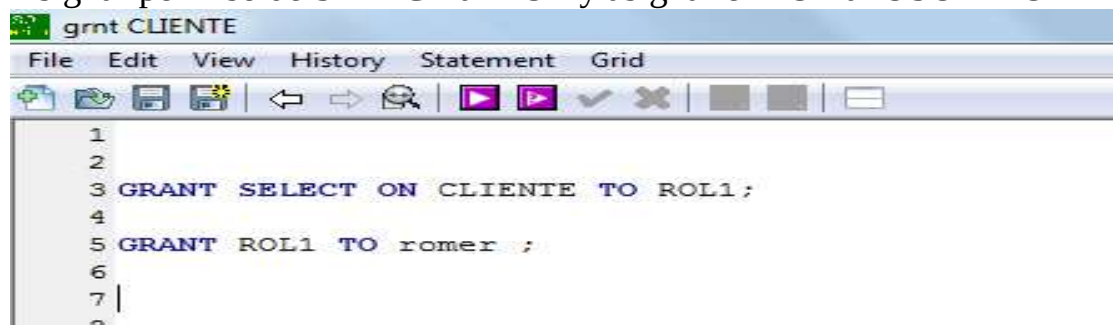
```
1
2  --DROP USER romer ;|
3
4
5 CREATE USER romer
6     PASSWORD 'romer'
7     FIRSTNAME 'Juan'
8     MIDDLENAME 'Carlos'
9     LASTNAME 'Romer';
10
11
12
```

Crear ROL



```
1
2 CREATE ROLE ROL1 ;
```

Asignar permiso de SELECT al ROL y asignar el ROL al USUARIO

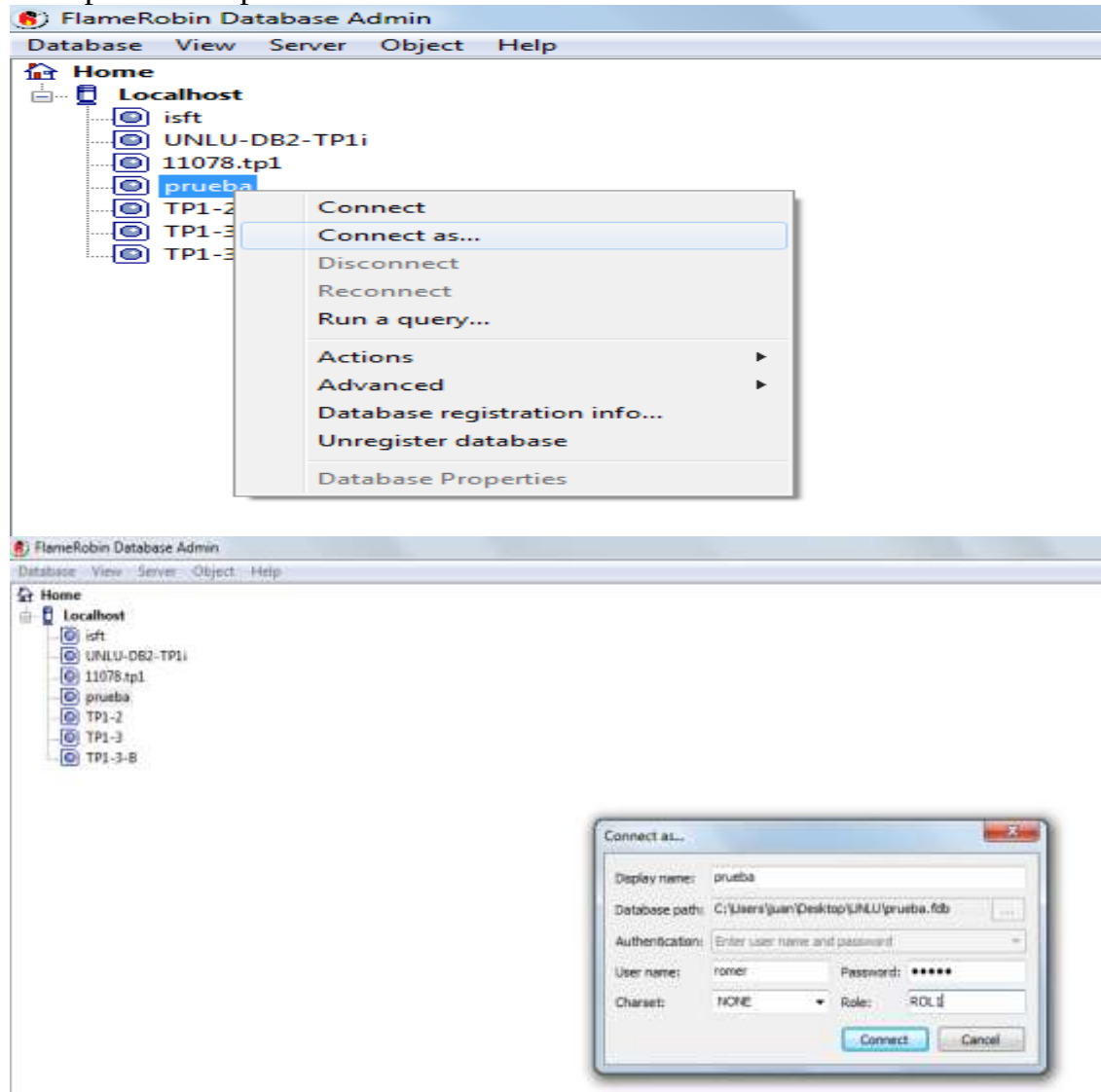


```
1
2
3 GRANT SELECT ON CLIENTE TO ROL1;
4
5 GRANT ROL1 TO romer ;
6
7 |
8
```

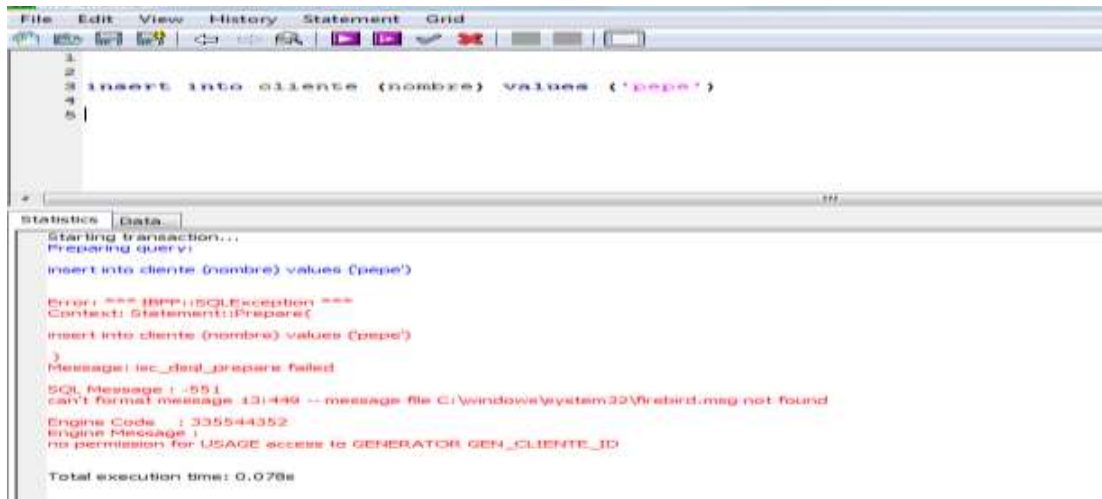
Hasta aquí conectado a la base de datos como usuario SYSDBA

Desconectarse como SYSDBA de la base de datos y conectarse como usuario común

Para probar los permisos



Intentar hacer un INSERT en la tabla CLIENTE



The screenshot shows a database client window with a menu bar (File, Edit, View, History, Statement, Grid) and a toolbar. The main text area contains the following SQL code:

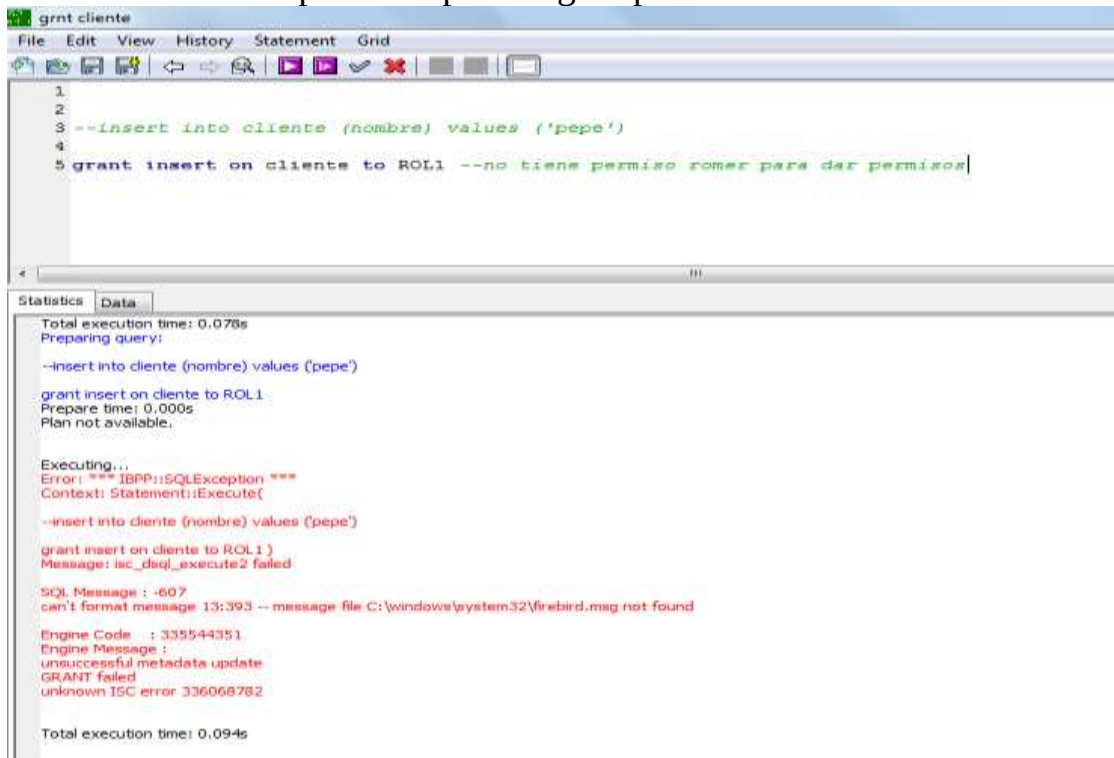
```
1  
2  
3 insert into cliente (nombre) values ('pepe')  
4  
5
```

Below the code, the 'Statistics' and 'Data' tabs are visible. The 'Statistics' tab shows the following output:

```
Starting transaction...  
Preparing query:  
insert into cliente (nombre) values ('pepe')  
  
Error: *** IBPP::SQLException ***  
Context: Statement::Prepare(  
insert into cliente (nombre) values ('pepe')  
)  
Message: isc_dsql_prepare failed  
SQL Message : -551  
can't format message 13:449 -- message file C:\windows\system32\Firebird.msg not found  
Engine Code : 335544352  
Engine Message :  
no permission for USAGE access to GENERATOR GEN_CLIENTE_ID  
  
Total execution time: 0.078s
```

El usuario no tiene permiso sobre el objeto GEN_CLIENTE_ID

El usuario no tiene permisos para asignar permisos



The screenshot shows a database client window with a menu bar (File, Edit, View, History, Statement, Grid) and a toolbar. The main text area contains the following SQL code:

```
1  
2  
3 --insert into cliente (nombre) values ('pepe')  
4  
5 grant insert on cliente to ROL1 --no tiene permiso romer para dar permisos
```

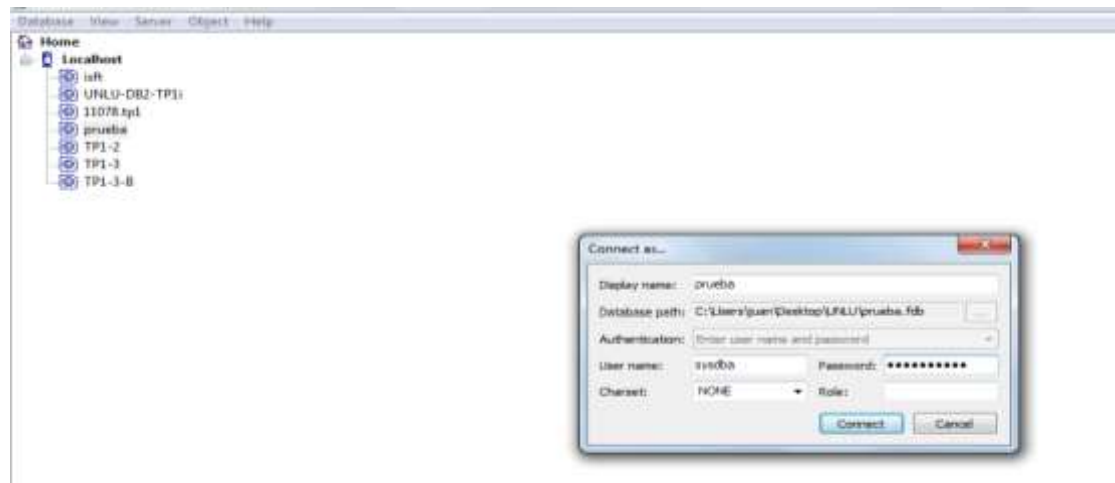
Below the code, the 'Statistics' and 'Data' tabs are visible. The 'Statistics' tab shows the following output:

```
Total execution time: 0.078s  
Preparing query:  
--insert into cliente (nombre) values ('pepe')  
  
grant insert on cliente to ROL1  
Prepare time: 0.000s  
Plan not available.  
  
Executing...  
Error: *** IBPP::SQLException ***  
Context: Statement::Execute(  
--insert into cliente (nombre) values ('pepe')  
grant insert on cliente to ROL1 )  
Message: isc_dsql_execute2 failed  
  
SQL Message : -607  
can't format message 13:393 -- message file C:\windows\system32\Firebird.msg not found  
Engine Code : 335544351  
Engine Message :  
unsuccessful metadata update  
GRANT failed  
unknown ISC error 336068782  
  
Total execution time: 0.094s
```

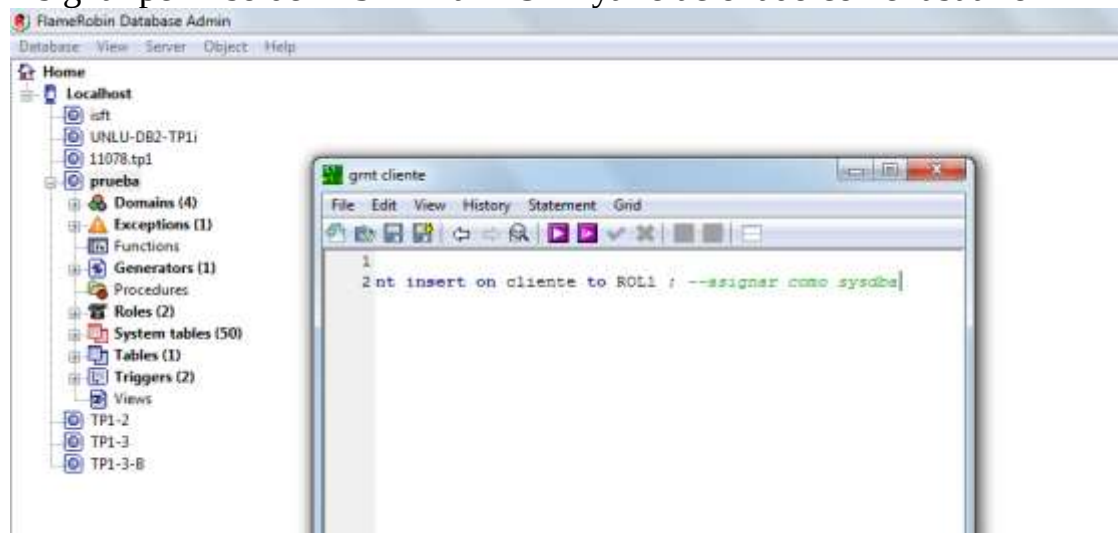
Desconectarse como usuario común



Conectarse como usuario SYSDBA

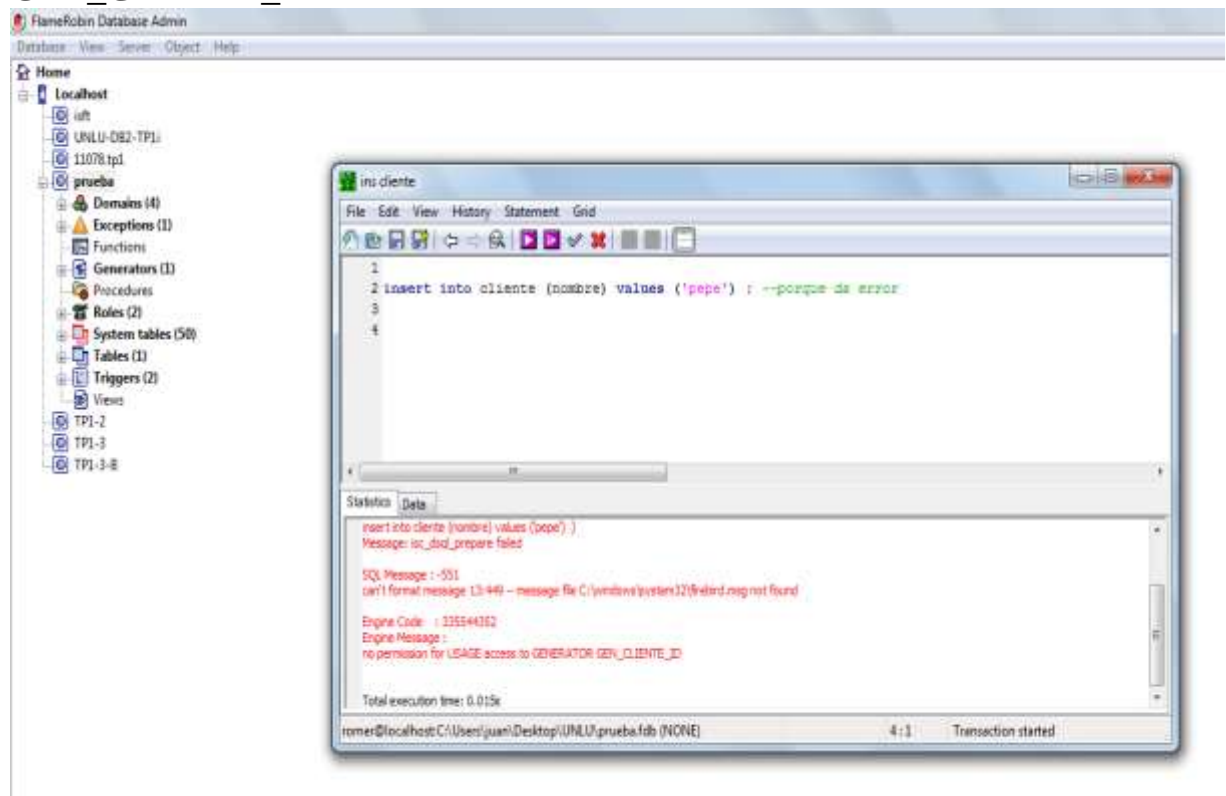


Asignar permiso de INSERT al ROL1 ya relacionado con el usuario



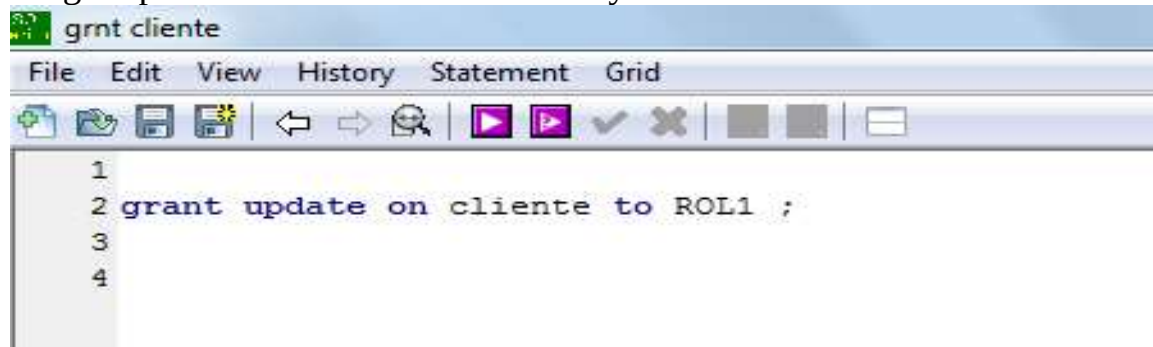
Disconnect como SYSDBA
Connect as romer con ROL1

El usuario tiene permiso de INSERT pero sigue sin permiso sobre el objeto GEN_CLIENTE_ID



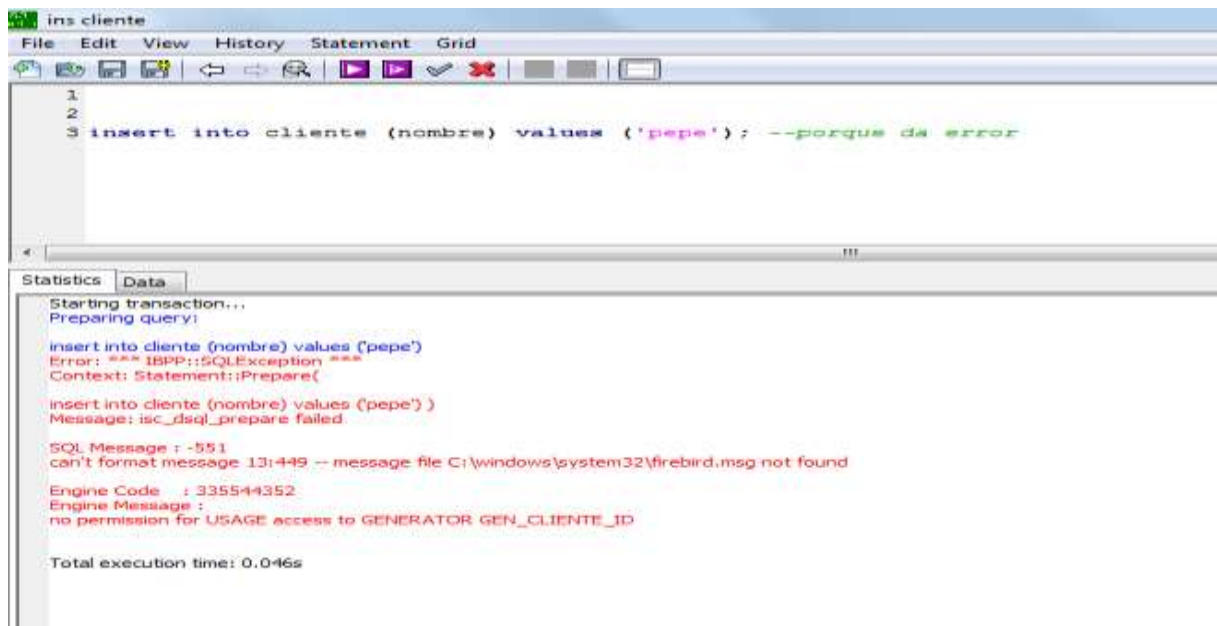
Disconnect como usuario común
Connect as sysdba

Asignar permiso de UPDATE al ROL1 ya relacionado con el usuario



Disconnect como sysdba
Connect as romer

El usuario tiene permiso de SELECT, INSERT Y UPDATE pero sigue sin permiso sobre el objeto GENERATOR GEN_CLIENTE_ID



The screenshot shows a window titled 'ins cliente' with a menu bar (File, Edit, View, History, Statement, Grid) and a toolbar. The main text area contains the following SQL code:

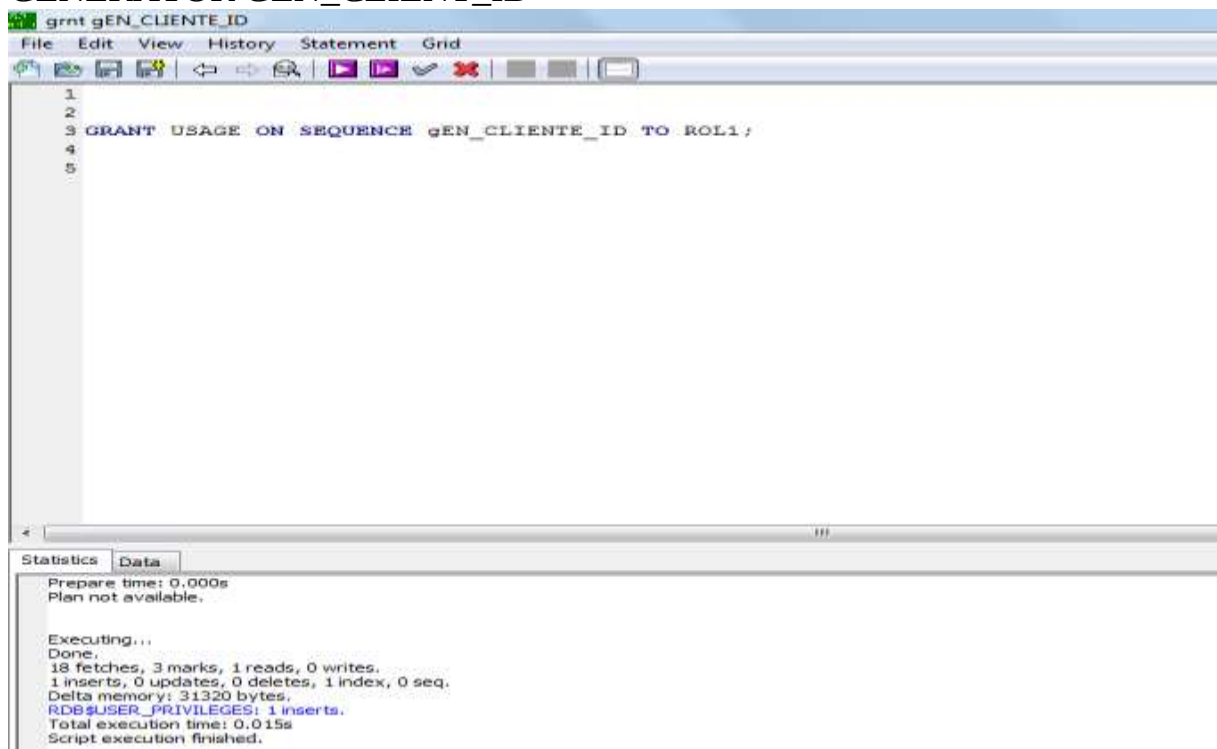
```
1  
2  
3 insert into cliente (nombre) values ('pepe'); --porque da error
```

Below the code area, there is a 'Statistics' tab and a 'Data' tab. The 'Statistics' tab is active, displaying the following error message:

```
Starting transaction...  
Preparing query:  
  
insert into cliente (nombre) values ('pepe')  
Error: *** ISPP::SQLException ***  
Context: Statement::Prepare(  
  
insert into cliente (nombre) values ('pepe') )  
Message: isc_dsql_prepare failed.  
  
SQL Message : -551  
can't format message 13:449 -- message file C:\windows\system32\firebird.msg not found  
  
Engine Code : 335544352  
Engine Message :  
no permission for USAGE access to GENERATOR GEN_CLIENTE_ID  
  
Total execution time: 0.046s
```

Disconnect como usuario común
Connect as sysdba

AHORA SIVAMOS A ASIGNAR PERMISO AL OBJETO
GENERATOR GEN_CLIENTE_ID



The screenshot shows a window titled 'grnt GEN_CLIENTE_ID' with a menu bar (File, Edit, View, History, Statement, Grid) and a toolbar. The main text area contains the following SQL code:

```
1  
2  
3 GRANT USAGE ON SEQUENCE GEN_CLIENTE_ID TO ROL1;  
4  
5
```

Below the code area, there is a 'Statistics' tab and a 'Data' tab. The 'Statistics' tab is active, displaying the following execution details:

```
Prepare time: 0.000s  
Plan not available.  
  
Executing...  
Done.  
18 fetches, 3 marks, 1 reads, 0 writes.  
1 inserts, 0 updates, 0 deletes, 1 index, 0 seq.  
Delta memory: 31320 bytes.  
RDB$USER_PRIVILEGES: 1 inserts.  
Total execution time: 0.015s  
Script execution finished.
```

Disconnect como sysdba
Connect as romer

Ahora funciona


```
ins CLIENTE
File Edit View History Statement Grid
1
2 insert into CLIENTE (nombre) values ('pepep')
3
4

Statistics Data
Executing...
Done.
158 fetches, 3 marks, 14 reads, 0 writes.
1 inserts, 0 updates, 0 deletes, 25 index, 0 seq.
Delta memory: 110000 bytes.
CLIENTE: 1 inserts.
1 row affected directly.
Total execution time: 0.015s
Script execution finished.
Committing transaction...
Done.
Starting transaction...
Preparing query:
insert into CLIENTE (nombre) values ('pepep')

Prepare time: 0.016s
Plan not available.

Executing...
Done.
19 fetches, 3 marks, 0 reads, 0 writes.
1 inserts, 0 updates, 0 deletes, 2 index, 0 seq.
Delta memory: 11680 bytes.
CLIENTE: 1 inserts.
1 row affected directly.
Total execution time: 0.016s
Script execution finished.
```

¿Qué pasa ahora en el UPDATE si ya tiene permiso?
No tiene permiso el usuario sobre el objeto EXCEPTION EX_CLIENTE1

```
upd CLIENTE
File Edit View History Statement Grid
1
2 -- insert into CLIENTE (nombre) values ('pepep') ;
3
4 -- select * from cliente ;
5
6 update CLIENTE set nombre = 'pepee' where id = 3 ;
7
8
9

Statistics Data
19 fetches, 0 marks, 0 reads, 0 writes.
0 inserts, 0 updates, 0 deletes, 1 index, 4 seq.
Delta memory: 17368 bytes.
Total execution time: 0.031s
Script execution finished.
Preparing query:
-- insert into CLIENTE (nombre) values ('pepep') ;
-- select * from cliente ;
update CLIENTE set nombre = 'pepee' where id = 3
Error: *** IBPP::SQLException ***
Context: Statement::Prepare(
-- insert into CLIENTE (nombre) values ('pepep') ;
-- select * from cliente ;
update CLIENTE set nombre = 'pepee' where id = 3 )
Message: isc_dsql_prepare failed
SQL Message : -551
can't format message 13:449 -- message file C:\windows\system32\firebird.msg not found
Engine Code : 335544352
Engine Message :
no permission for USAGE access to EXCEPTION EX_CLIENTE1

Total execution time: 0.000s
```

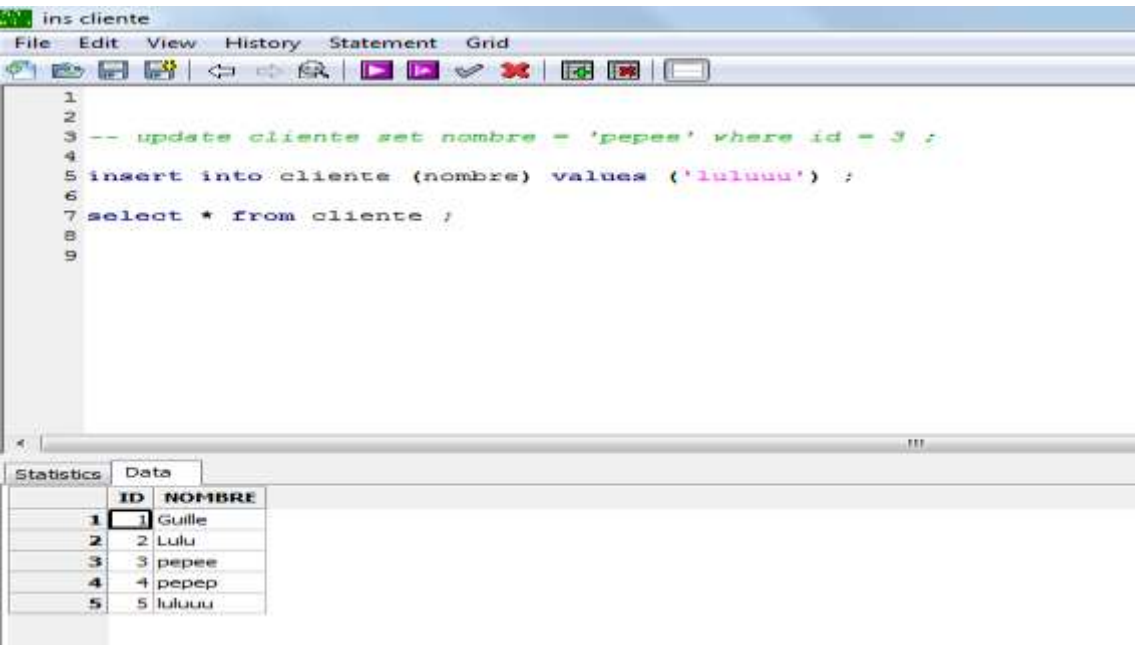
Disconnect como usuario común - Connect as sysdba

Asignar permiso sobre el objeto EXCEPTION EX_CLIENTE1



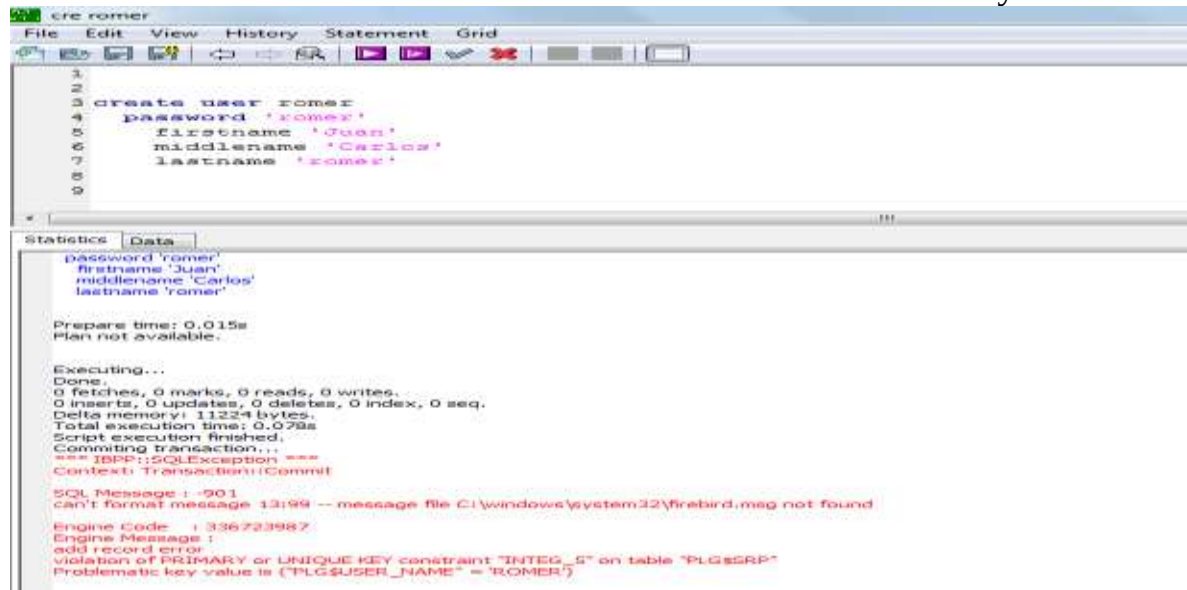
Disconnect como sysdba
Connect as romer

Comprobar los permisos para UPDATE, INSERT y SELECT en la tabla CLIENTE



3- Implementación de tipo A cantidad de ítem en afactura con Afactura_Aux

Crear USUARIO PARA LA BASE DE DATOS. Error el usuario ya existe



The screenshot shows a SQL IDE window titled 'cre romer'. The SQL script in the editor is:

```
1
2
3 create user romer
4     password 'romer'
5     firstname 'Juan'
6     middlename 'Carlos'
7     lastname 'romer'
8
9
```

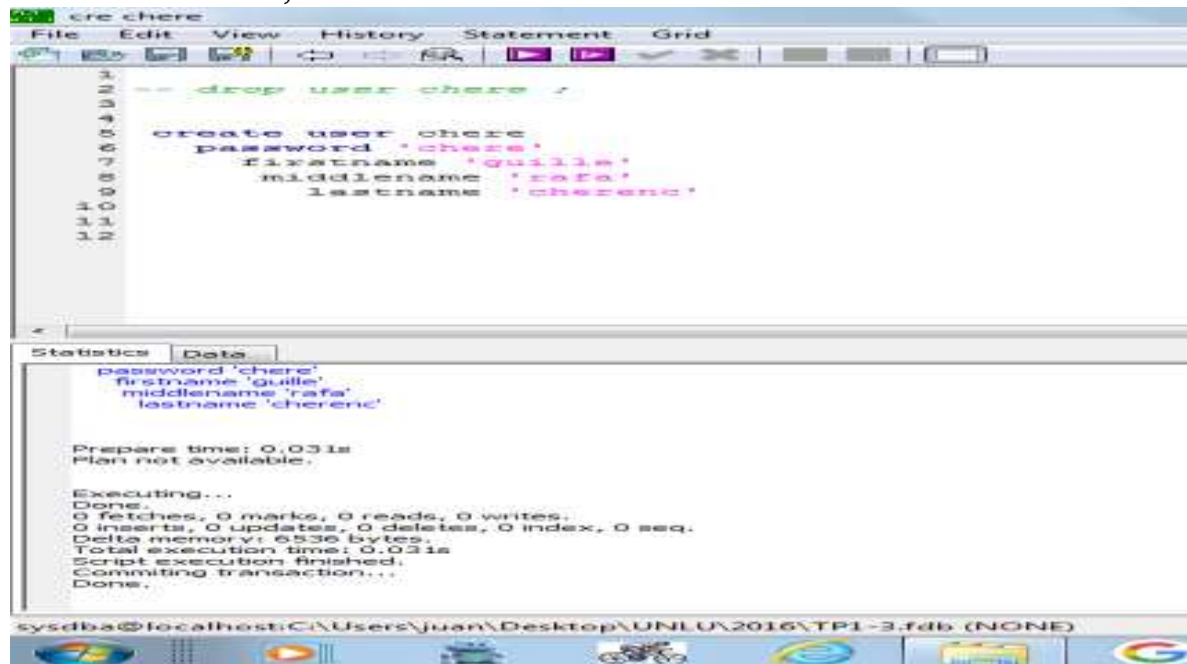
The 'Statistics' tab is selected, showing the following output:

```
password 'romer'
firstname 'Juan'
middlename 'Carlos'
lastname 'romer'

Prepare time: 0.015s
Plan not available.

Executing...
Done.
0 fetches, 0 marks, 0 reads, 0 writes.
0 inserts, 0 updates, 0 deletes, 0 index, 0 seq.
Delta memory: 11224 bytes.
Total execution time: 0.079s
Script execution finished.
Committing transaction...
*** IBPP:SQLException ***
Context: Transaction:Commit
SQL Message : -201
can't format message 13199 -- message file C:\windows\system32\firebird.msg not found
Engine Code : 336723987
Engine Message :
add record error
violation of PRIMARY or UNIQUE KEY constraint "INTEG_5" on table "PLGSRP"
Problematic key value is ("PLG$USER_NAME" = "ROMER")
```

Crear otro usuario, no necesariamente



The screenshot shows a SQL IDE window titled 'cre chere'. The SQL script in the editor is:

```
1
2 -- drop user chere ;
3
4 create user chere
5     password 'chere'
6     firstname 'guille'
7     middlename 'rafa'
8     lastname 'cherenc'
9
10
11
12
```

The 'Statistics' tab is selected, showing the following output:

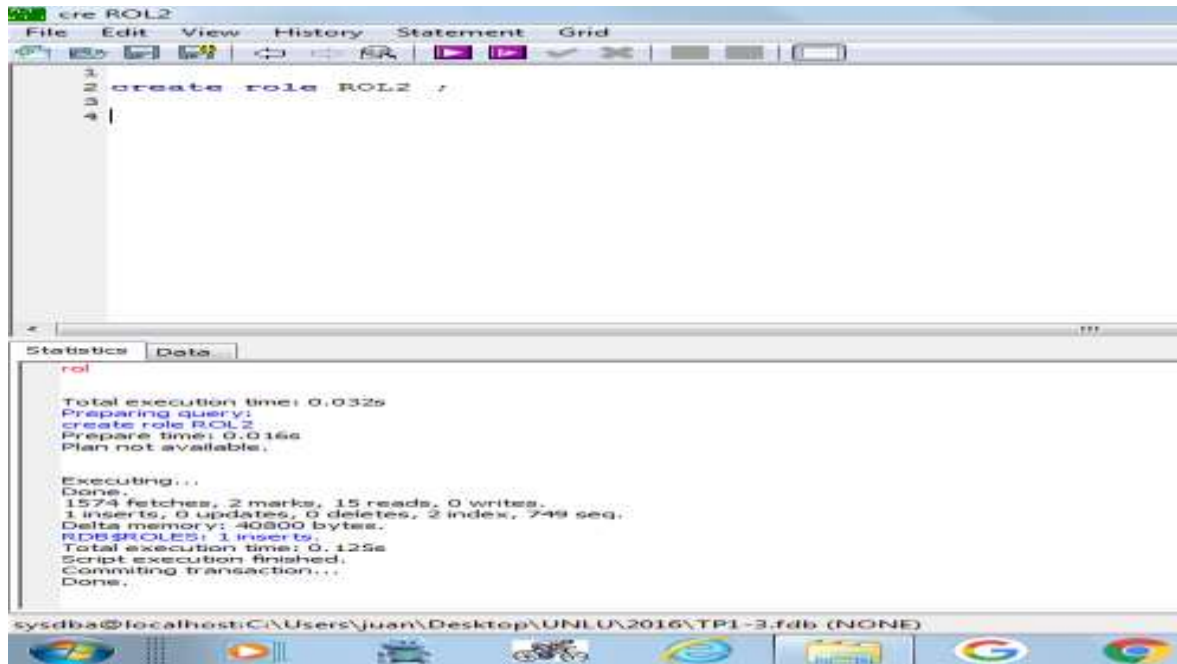
```
password 'chere'
firstname 'guille'
middlename 'rafa'
lastname 'cherenc'

Prepare time: 0.031s
Plan not available.

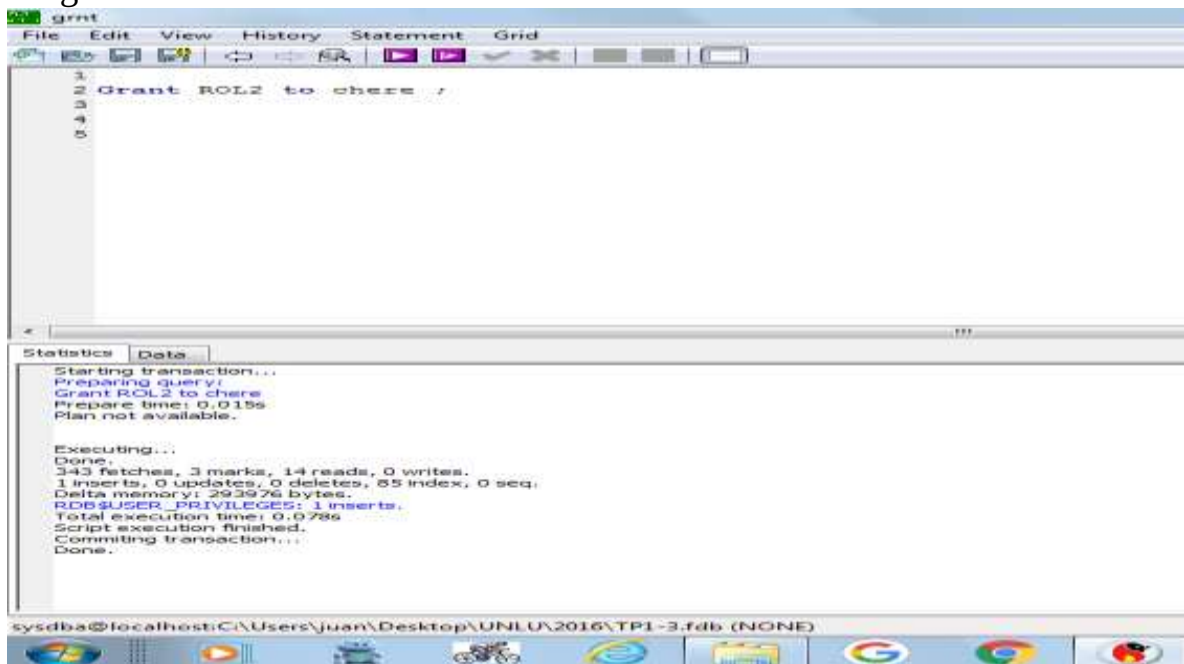
Executing...
Done.
0 fetches, 0 marks, 0 reads, 0 writes.
0 inserts, 0 updates, 0 deletes, 0 index, 0 seq.
Delta memory: 6536 bytes.
Total execution time: 0.031s
Script execution finished.
Committing transaction...
Done.
```

The taskbar at the bottom shows the system is 'tysdba@localhost: C:\Users\juan\Desktop\UNLUX\2016\TP1-3.fdb (NONE)'.

Crear otro ROL

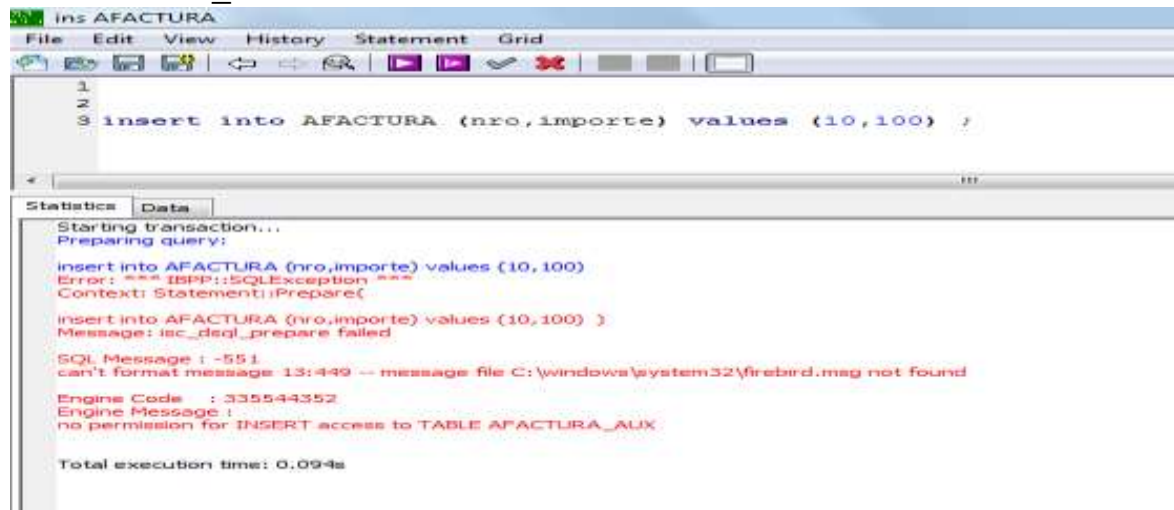


Asignar el ROL2 al usuario



Disconnect como sysdba
Connect as chere

Probar INSERT en la tabla AFACTURA
Trigger TRG_AIAFACTURA no tiene permiso de INSERT en tabla AFACTURA_AUX



The screenshot shows the SQL Developer interface with a query window titled 'ins AFACTURA'. The query is: `insert into AFACTURA (nro,importe) values (10,100) ;`. The 'Statistics' tab is selected, showing the following error message:
Starting transaction...
Preparing query:
insert into AFACTURA (nro,importe) values (10,100)
Error: *** ISPP::SQLException ***
Context: Statement()Prepare()
insert into AFACTURA (nro,importe) values (10,100) ;
Message: isc_dsql_prepare failed
SQL Message : -551
can't format message 13:449 -- message file C:\windows\system32\firebird.msg not found
Engine Code : 335544352
Engine Message :
no permission for INSERT access to TABLE AFACTURA_AUX
Total execution time: 0.094s

Disconnect
Connect as sysdba

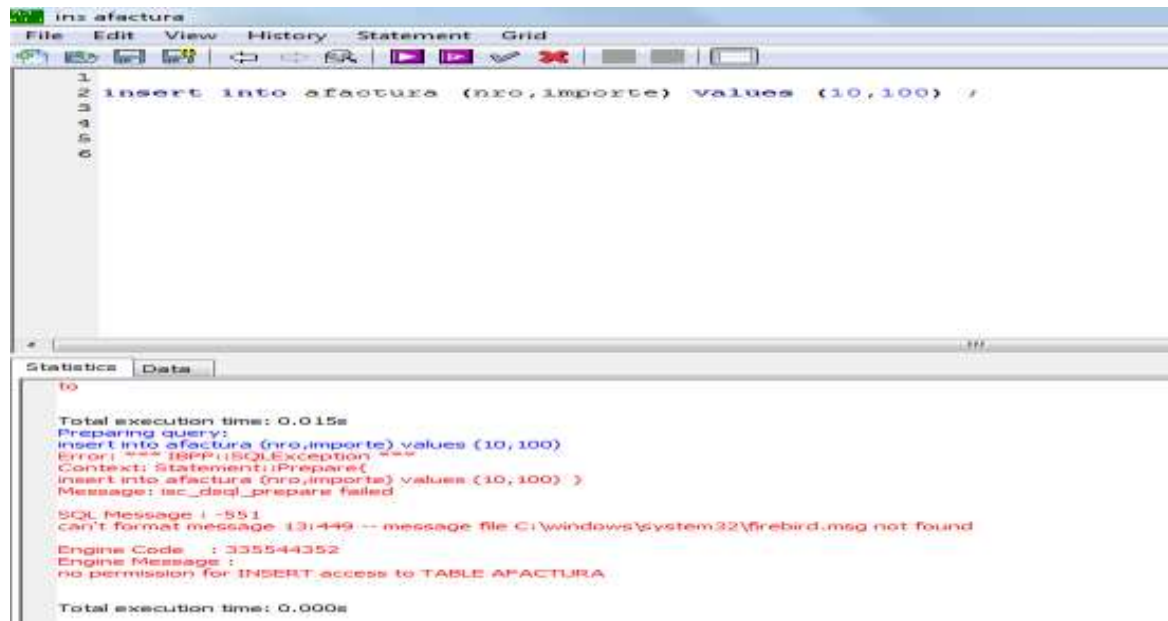
Asignar permiso de INSERT en tabla AFACTURA_AUX al trigger TRG_AIAFACTURA



The screenshot shows the SQL Developer interface with a query window titled 'grnt AFACTURA_AUX'. The query is: `grant insert on AFACTURA_AUX TO trigger TRG_AIAFACTURA ;|`. The 'Statistics' tab is selected, showing the following output:
grant insert on AFACTURA_AUX TO trigger TRG_AIAFACTURA
Prepare time: 0.000s
Plan not available.
Executing...
Done.
23 fetches, 3 marks, 3 reads, 0 writes.
1 inserts, 0 updates, 0 deletes, 3 index, 0 seq.
Delta memory: 24460 bytes.
RDB\$USER_PRIVILEGES: 1 inserts,
Total execution time: 0.047s
Script execution finished.
Committing transaction...
Done.

Disconnect como sysdba
Connect as chere

Probar INSERT en la tabla AFACTURA



The screenshot shows the SQL Developer interface with a query window titled 'ins afactura'. The query is: `insert into afactura (nro,importe) values (10,100) ;`. The 'Statistics' tab is selected, displaying an error message: `ORA-01031: insufficient privileges`. The error details include: `SQL Message I -551`, `can't format message 131449 -- message file C:\windows\system32\firebird.msg not found`, `Engine Code : 335544352`, and `Engine Message : no permission for INSERT access to TABLE AFACTURA`. The total execution time is 0.000s.

Disconnect como chere
Connect as sysdba

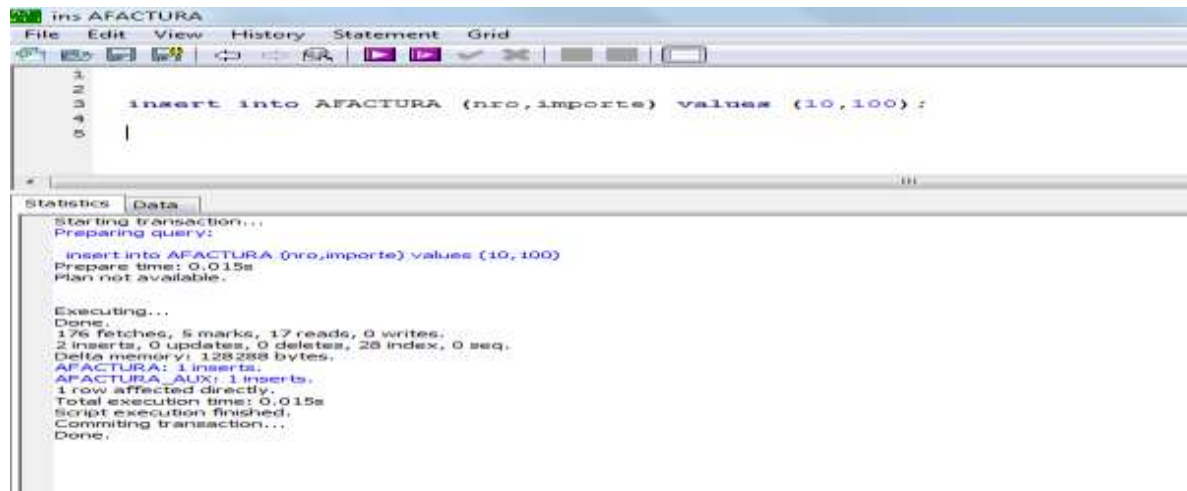
Asignar permiso de INSERT en tabla AFACTURA



The screenshot shows the SQL Developer interface with a query window titled 'grnt afactura'. The query is: `grant insert on afactura to ROL2 ;`. The 'Statistics' tab is selected, displaying the execution details: `Starting transaction...`, `Preparing query:`, `grant insert on afactura to ROL2`, `Prepare time: 0.000s`, `Plan not available.`, `Executing...`, `Done.`, `32 fetches, 3 marks, 2 reads, 0 writes.`, `1 inserts, 0 updates, 0 deletes, 4 index, 0 seq.`, `Delta memory: 69320 bytes.`, `RDBUSER_PRIVILEGES: 1 inserts.`, `Total execution time: 0.016s`, `Script execution finished.`, `Committing transaction...`, `Done.`

Disconnect sysdba
Connect as chere

Probar INSERT en tabla AFACTURA

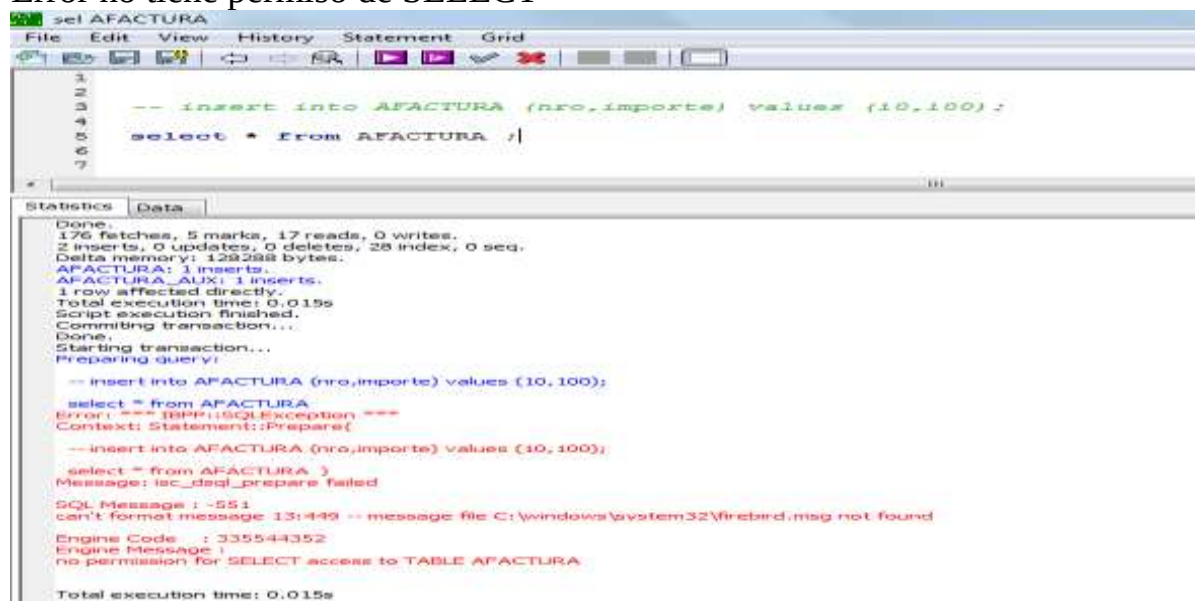


The screenshot shows the SQL Developer interface with a script named 'ins AFACTURA'. The script contains an INSERT statement: `insert into AFACTURA (nro,importe) values (10,100);`. The execution log in the bottom pane shows the following details:

```
Starting transaction...
Preparing query:
insert into AFACTURA (nro,importe) values (10,100)
Prepare time: 0.015s
Plan not available.

Executing...
Done.
176 fetches, 5 marks, 17 reads, 0 writes.
2 inserts, 0 updates, 0 deletes, 28 index, 0 seq.
Delta memory: 128288 bytes.
AFACTURA: 1 inserts.
AFACTURA_AUX: 1 inserts.
1 row affected directly.
Total execution time: 0.015s
Script execution finished.
Committing transaction...
Done.
```

Probar SELECT en tabla AFACTURA
Error no tiene permiso de SELECT



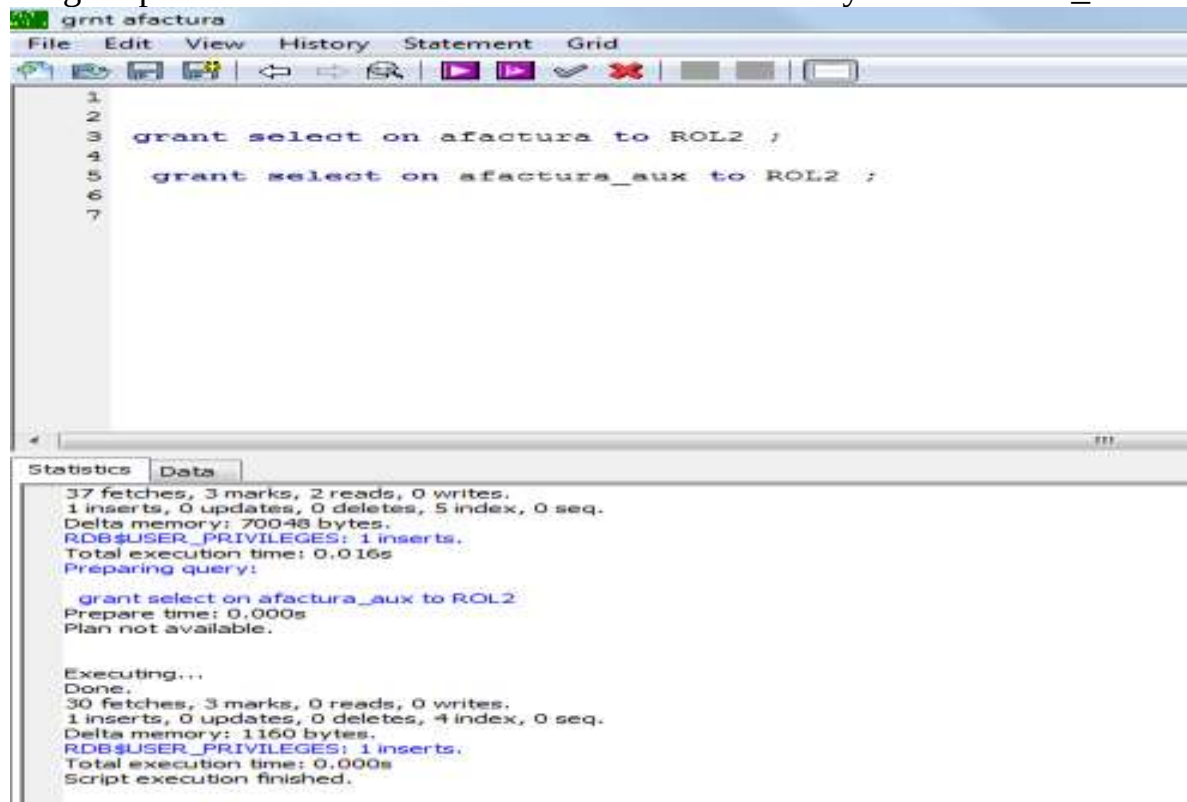
The screenshot shows the SQL Developer interface with a script named 'sel AFACTURA'. The script contains an INSERT statement followed by a SELECT statement: `-- insert into AFACTURA (nro,importe) values (10,100);` and `select * from AFACTURA ;`. The execution log in the bottom pane shows the following details:

```
Done.
176 fetches, 5 marks, 17 reads, 0 writes.
2 inserts, 0 updates, 0 deletes, 28 index, 0 seq.
Delta memory: 128288 bytes.
AFACTURA: 1 inserts.
AFACTURA_AUX: 1 inserts.
1 row affected directly.
Total execution time: 0.015s
Script execution finished.
Committing transaction...
Done.
Starting transaction...
Preparing query:
-- insert into AFACTURA (nro,importe) values (10,100);
select * from AFACTURA
Error: *** ORAPLSQLException ***
Context: Statement::Prepare()
--insert into AFACTURA (nro,importe) values (10,100);
select * from AFACTURA ;
Message: isc_dsql_prepare failed
SQL Message : -551
can't format message 13:449 -- message file C:\windows\system32\firebird.msg not found
Engine Code : 33554352
Engine Message :
no permission for SELECT access to TABLE AFACTURA

Total execution time: 0.015s
```

Disconnect chere
Connect as sysdba

Asignar permiso de SELECT a las tablas AFACTURA y AFACTURA_AUX



The screenshot shows the SQL Developer interface with a script titled 'grnt afactura'. The script contains two SQL statements to grant SELECT permissions to a user named ROL2 on the tables AFACTURA and AFACTURA_AUX. The 'Statistics' tab is active, showing execution details for the second statement.

```
1  
2  
3 grant select on afactura to ROL2 ;  
4  
5 grant select on afactura_aux to ROL2 ;  
6  
7
```

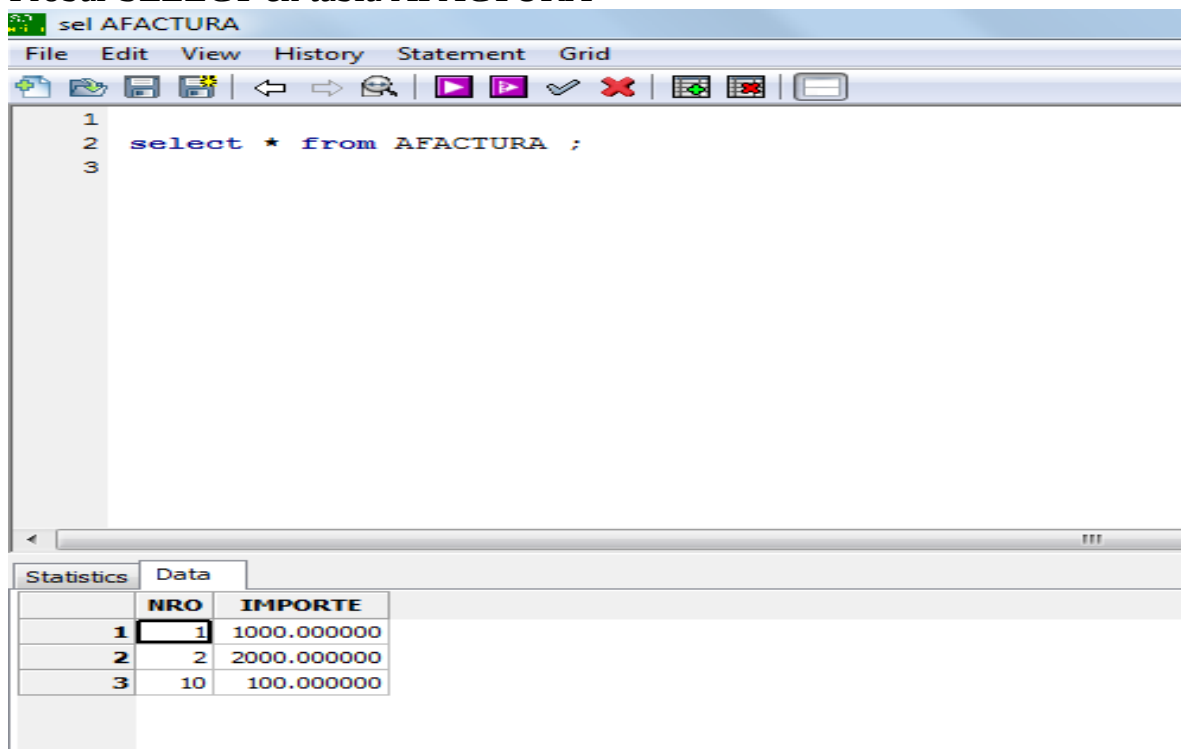
Statistics | Data

37 fetches, 3 marks, 2 reads, 0 writes.
1 inserts, 0 updates, 0 deletes, 5 index, 0 seq.
Delta memory: 70048 bytes.
RDB\$USER_PRIVILEGES: 1 inserts.
Total execution time: 0.016s
Preparing query:
grant select on afactura_aux to ROL2
Prepare time: 0.000s
Plan not available.

Executing...
Done.
30 fetches, 3 marks, 0 reads, 0 writes.
1 inserts, 0 updates, 0 deletes, 4 index, 0 seq.
Delta memory: 1160 bytes.
RDB\$USER_PRIVILEGES: 1 inserts.
Total execution time: 0.000s
Script execution finished.

Disconnect como sysdba
Connect as chere

Probar SELECT en tabla AFACTURA



The screenshot shows a SQL*Plus window titled 'sql AFACTURA'. The menu bar includes File, Edit, View, History, Statement, and Grid. The toolbar contains icons for file operations, navigation, and execution. The main text area displays the following SQL statement:

```
1  
2 select * from AFACTURA ;  
3
```

Below the text area, there are two tabs: 'Statistics' and 'Data'. The 'Data' tab is active, showing a table with three columns: 'NRO', 'IMPORTE', and an unlabeled column. The data is as follows:

	NRO	IMPORTE	
1	1	1000.000000	
2	2	2000.000000	
3	10	100.000000	

Probar SELECT en tabla AFACTURA_AUX

sel AFACTURA_AUX

File Edit View History Statement Grid



1
2
3
4
5

```
select * from AFACTURA_AUX ;
```

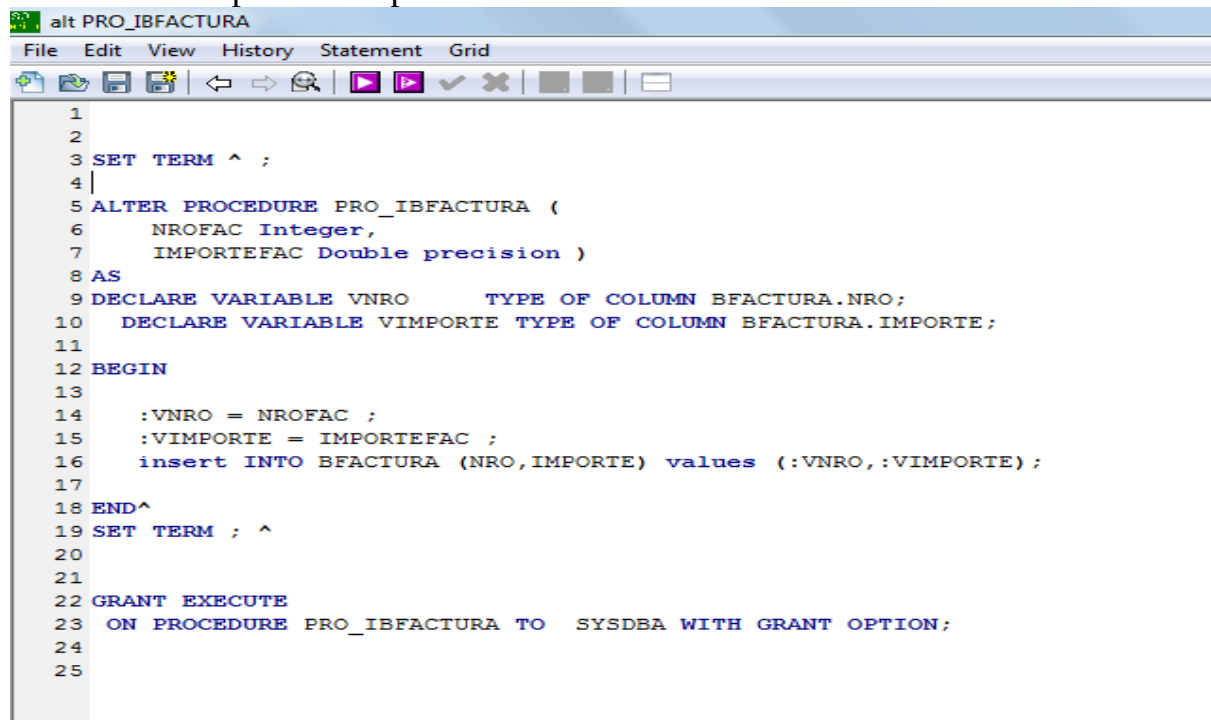
Statistics

Data

	NRO	CI
1	1	3
2	2	3
3	10	0

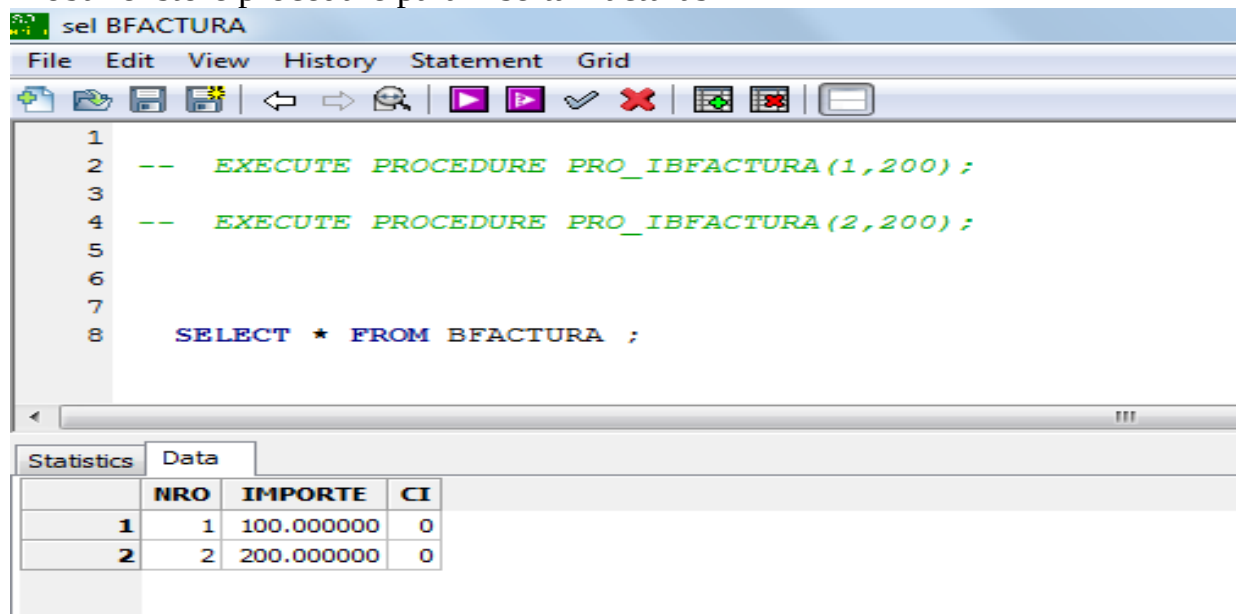
Implementación de cantidad de ítem de la factura TIPO B sin tabla de factura auxiliar

Crear un store procedure para insertar una fila en la tabla BFACTURA



```
alt PRO_IBFACTURA
File Edit View History Statement Grid
1
2
3 SET TERM ^ ;
4 |
5 ALTER PROCEDURE PRO_IBFACTURA (
6     NROFAC Integer,
7     IMPORTEFAC Double precision )
8 AS
9 DECLARE VARIABLE VNRO      TYPE OF COLUMN BFACTURA.NRO;
10  DECLARE VARIABLE VIMPORTE TYPE OF COLUMN BFACTURA.IMPORTE;
11
12 BEGIN
13
14     :VNRO = NROFAC ;
15     :VIMPORTE = IMPORTEFAC ;
16     insert INTO BFACTURA (NRO,IMPORTE) values (:VNRO,:VIMPORTE);
17
18 END^
19 SET TERM ; ^
20
21
22 GRANT EXECUTE
23 ON PROCEDURE PRO_IBFACTURA TO  SYSDBA WITH GRANT OPTION;
24
25
```

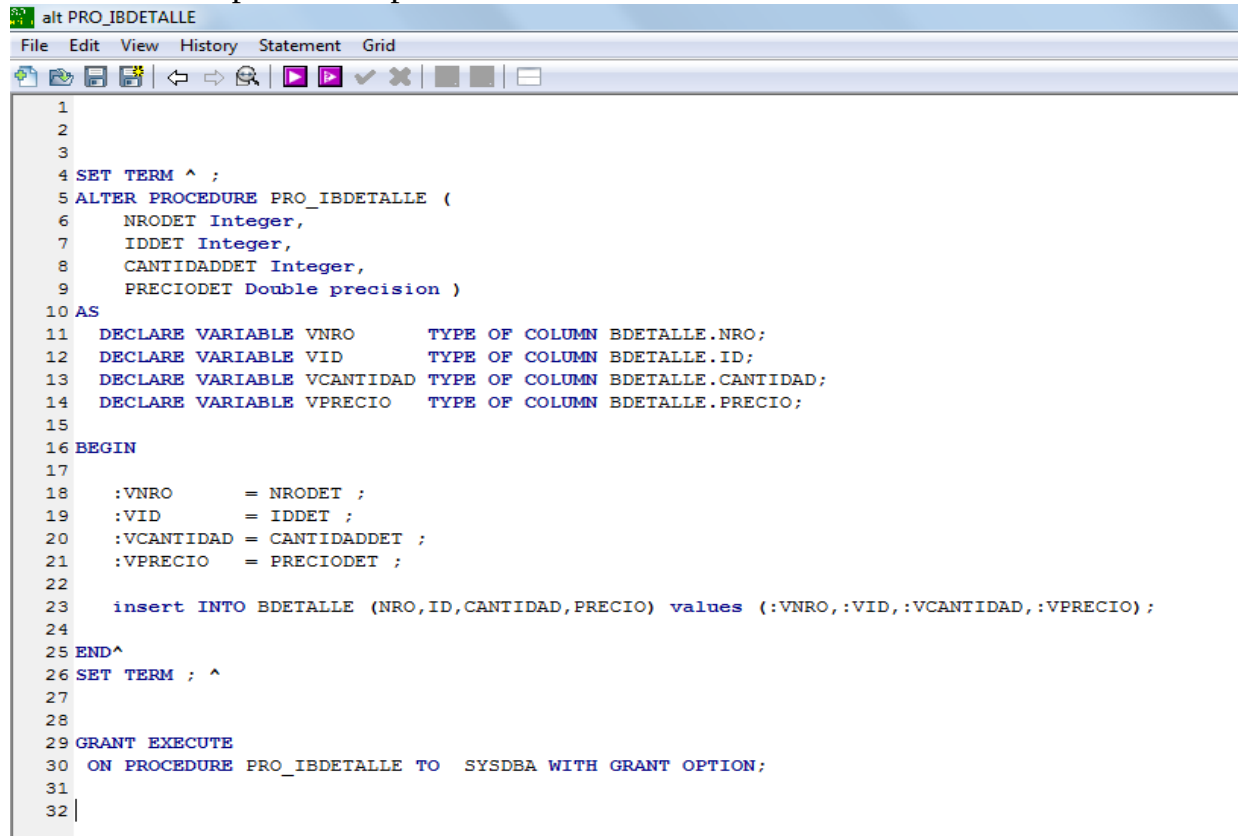
Probar el store procedure para insertar facturas



```
sel BFACTURA
File Edit View History Statement Grid
1
2 -- EXECUTE PROCEDURE PRO_IBFACTURA(1,200);
3
4 -- EXECUTE PROCEDURE PRO_IBFACTURA(2,200);
5
6
7
8  SELECT * FROM BFACTURA ;
```

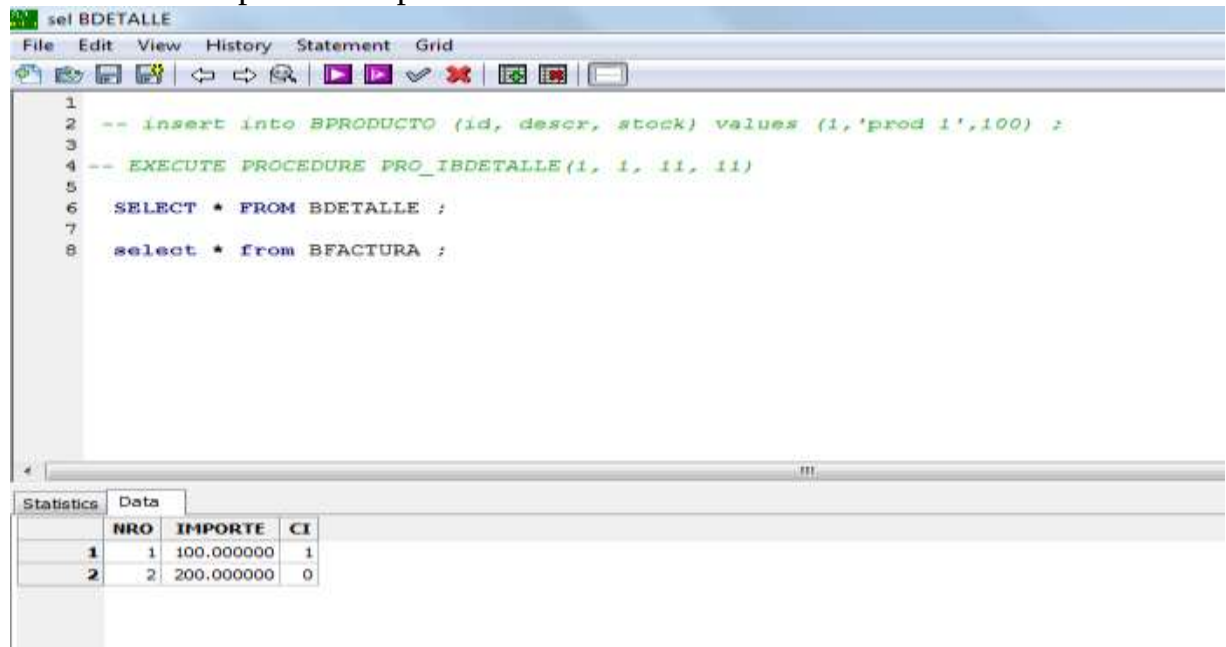
	NRO	IMPORTE	CI
1	1	100.000000	0
2	2	200.000000	0

Crear un store procedure para insertar una fila en BDETALLE



```
1
2
3
4 SET TERM ^ ;
5 ALTER PROCEDURE PRO_IBDETALLE (
6     NRODET Integer,
7     IDDET Integer,
8     CANTIDADET Integer,
9     PRECIODET Double precision )
10 AS
11     DECLARE VARIABLE VNRO      TYPE OF COLUMN BDETALLE.NRO;
12     DECLARE VARIABLE VID       TYPE OF COLUMN BDETALLE.ID;
13     DECLARE VARIABLE VCANTIDAD TYPE OF COLUMN BDETALLE.CANTIDAD;
14     DECLARE VARIABLE VPRECIO   TYPE OF COLUMN BDETALLE.PRECIO;
15
16 BEGIN
17
18     :VNRO      = NRODET ;
19     :VID       = IDDET ;
20     :VCANTIDAD = CANTIDADET ;
21     :VPRECIO   = PRECIODET ;
22
23     insert INTO BDETALLE (NRO,ID,CANTIDAD,PRECIO) values (:VNRO,:VID,:VCANTIDAD,:VPRECIO) ;
24
25 END^
26 SET TERM ; ^
27
28
29 GRANT EXECUTE
30 ON PROCEDURE PRO_IBDETALLE TO  SYSDBA WITH GRANT OPTION;
31
32 |
```

Probar el store procedure para insertar filas en detalle



```
1
2 -- insert into BPRODUCTO (id, descr, stock) values (1,'prod 1',100) ;
3
4 -- EXECUTE PROCEDURE PRO_IBDETALLE(1, 1, 11, 11)
5
6 SELECT * FROM BDETALLE ;
7
8 select * from BFACTURA ;
```

	NRO	IMPORTE	CI
1	1	100.000000	1
2	2	200.000000	0

Crear un store procedure para hacer delete de la tabla BDETALLE

```
cre PRO_DBDETALLE
File Edit View History Statement Grid
1
2
3 SET TERM ^ ;
4
5 CREATE PROCEDURE PRO_DBDETALLE
6 ( NRODET integer , IDDET integer )
7
8 AS
9 DECLARE VARIABLE VNRO          TYPE OF COLUMN BDETALLE.NRO;
10 DECLARE VARIABLE VID           TYPE OF COLUMN BDETALLE.ID;
11
12 BEGIN
13
14     :VNRO      = NRODET ;
15     :VID       = IDDET ;
16
17     DELETE FROM BDETALLE WHERE NRO = :VNRO AND ID = :IDDET ;
18
19 END^
20 SET TERM ; ^
21
22
```

Lo que tengo en la tabla BDETALLE

```
exec PRO_IBDETALLE
File Edit View History Statement Grid
1
2
3 execute procedure PRO_IBDETALLE (2,1,10,12) ;
4
5 select * from bdetalle ;
6
7 |
```

	NRO	ID	CANTIDAD	PRECIO
1	1	1	11	11.000000
2	2	1	10	12.000000

Probar el store procedure para eliminar una fila de la tabla BDETALLE

```
sel BDETALLE
File Edit View History Statement Grid
1
2
3 -- EXECUTE PROCEDURE PRO_DBDETALLE (1,1) ;
4
5 SELECT * FROM BDETALLE ;
```

	NRO	ID	CANTIDAD	PRECIO
1	2	1	10	12.000000

Crear un store procedure para modificar NRO en la tabla BDETALLE

```
cre PRO_UBDETALLE
File Edit View History Statement Grid
1
2
3 SET TERM ^ ;
4
5 CREATE PROCEDURE PRO_UBDETALLE
6 ( NROOLD INTEGER , NRONEW integer )
7
8 AS
9   DECLARE VARIABLE VNROOLD      TYPE OF COLUMN BDETALLE.NRO;
10  DECLARE VARIABLE VNRONEW      TYPE OF COLUMN BDETALLE.NRO;
11
12 BEGIN
13
14   :VNROOLD = NROOLD ;
15   :VNRONEW = NRONEW ;
16
17   update BDETALLE set nro = :VNRONEW where nro = :VNROOLD ;
18
19 END^
20
21 SET TERM ; ^
22
23 |
```

Probar el store procedure para modificar NRO en la tabla BDETALLE

```
sel bdetalle
File Edit View History Statement Grid
1
2
3
4 -- execute procedure pro_ubdetalle (2,1) ;
5
6 select * from bdetalle;
```

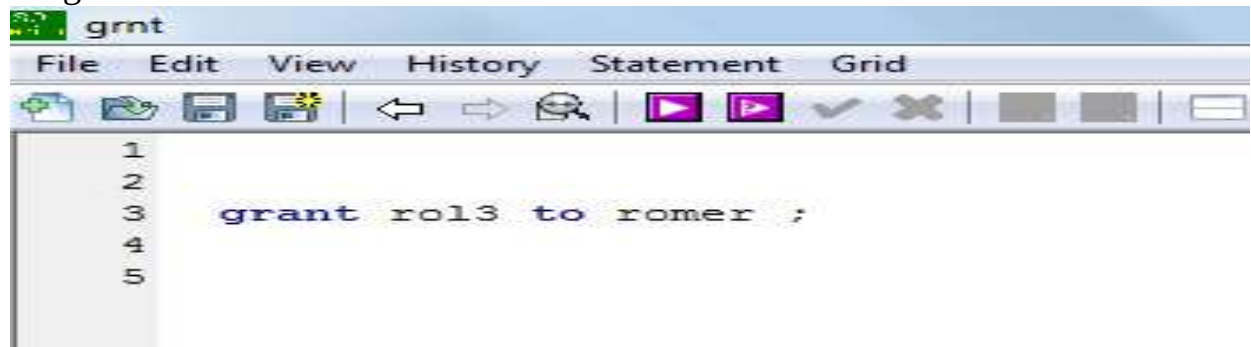
Statistics		Data		
	NRO	ID	CANTIDAD	PRECIO
1	1	1	10	12.000000

Hasta aquí todo funciono porque el usuario es SYSDBA, ahora vamos a cambiar de usuario con un rol nuevo.

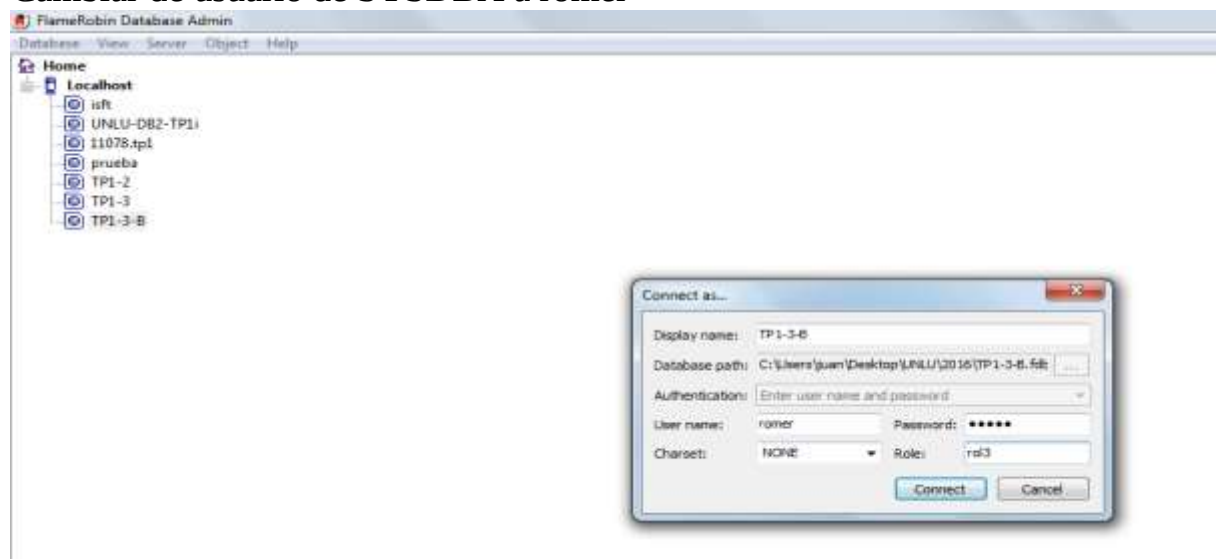
Creamos un nuevo Rol

```
cre rol3
File Edit View History Statement Grid
1
2
3 create role rol3 ;
4
5 |
```

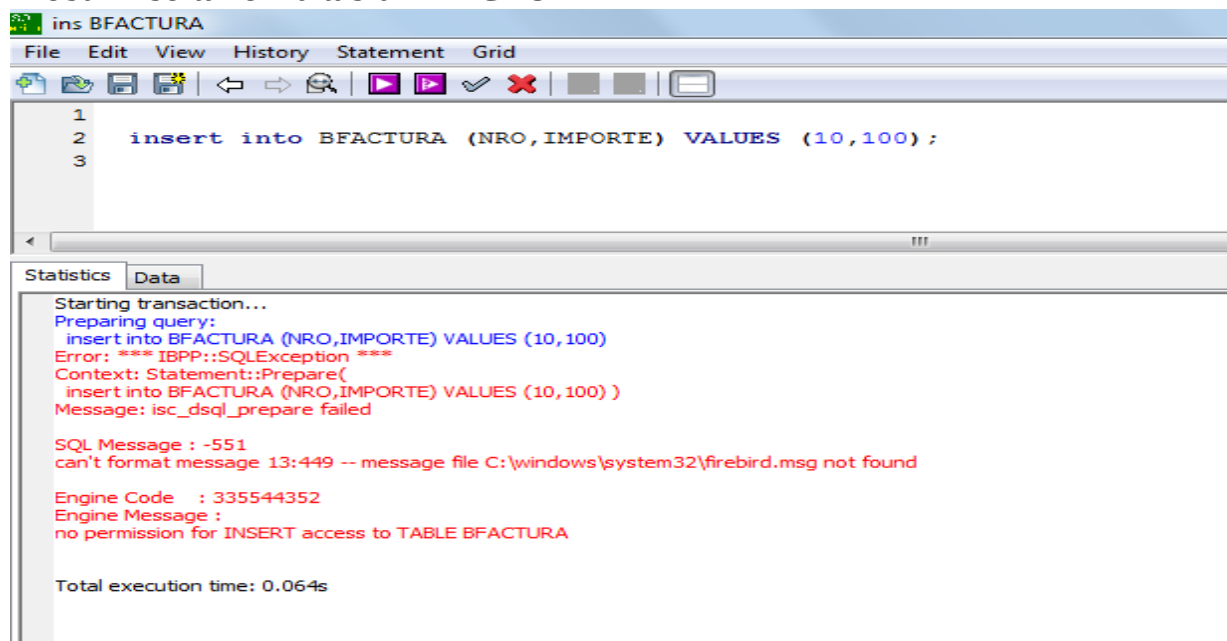

Asignar rol3 al usuario romer



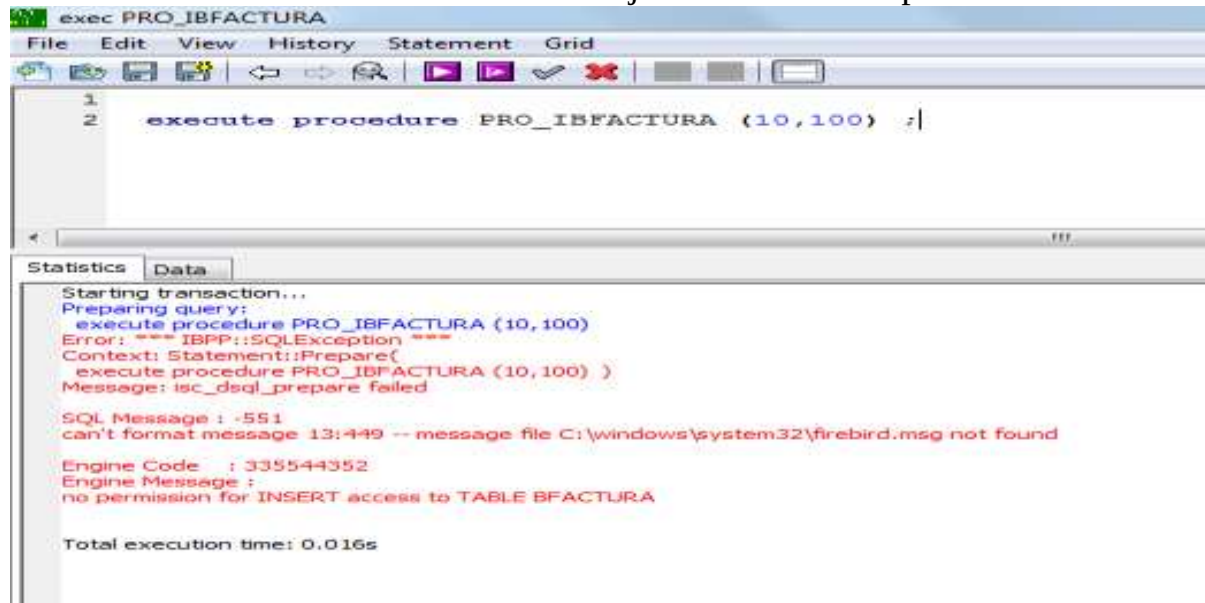
Cambiar de usuario de SYSDBA a romer



Probar insertar en la tabla BFACTURA



Probar insertar en la tabla BFACTURA ejecutando el store procedure.



```
1
2  execute procedure PRO_IBFACTURA (10,100) ;|
```

Statistics Data

Starting transaction...
Preparing query:
execute procedure PRO_IBFACTURA (10,100)
Error: === IBPP::SQLException ===
Context: Statement::Prepare(
execute procedure PRO_IBFACTURA (10,100))
Message: isc_dsql_prepare failed

SQL Message : -551
can't format message 13:449 -- message file C:\windows\system32\firebird.msg not found

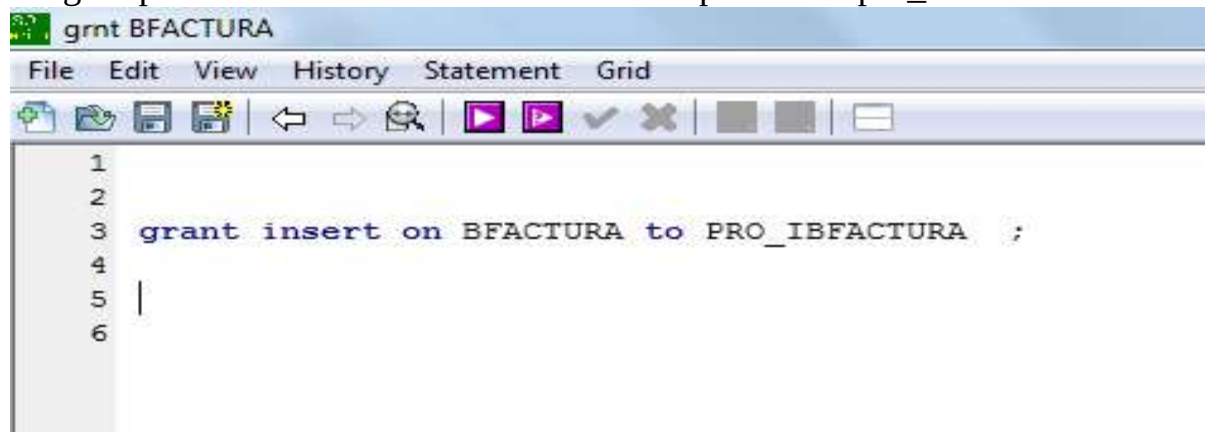
Engine Code : 335544352
Engine Message :
no permission for INSERT access to TABLE BFACTURA

Total execution time: 0.016s

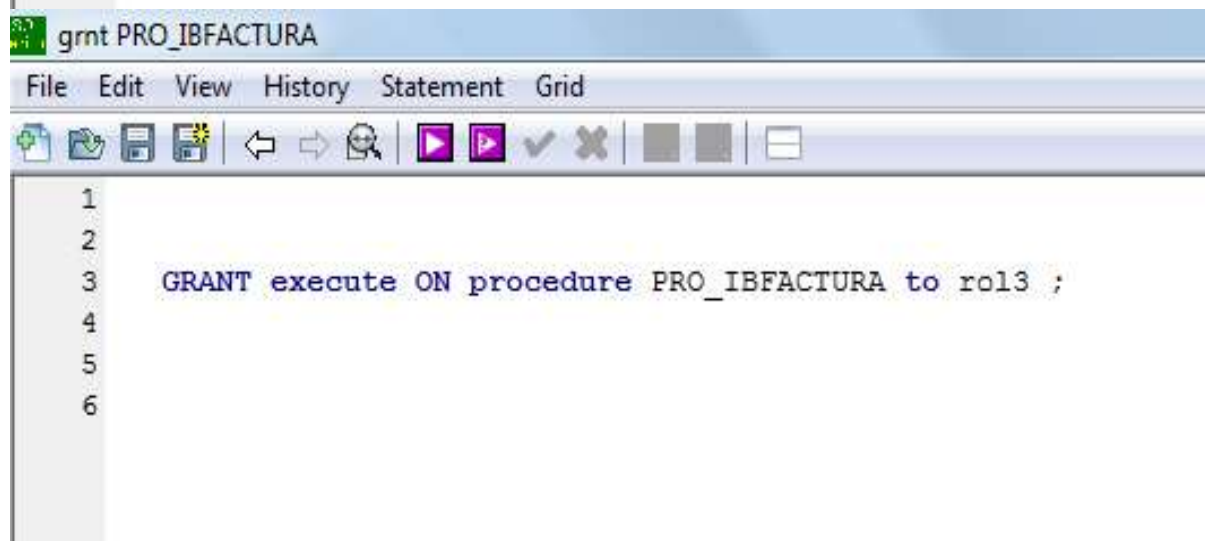
Disconnect como romer

Connect como sysdba

Asignar permiso de insert en bfactura al store procedure pro_ibfactura



```
1
2
3  grant insert on BFACTURA to PRO_IBFACTURA ;
4
5  |
6
```

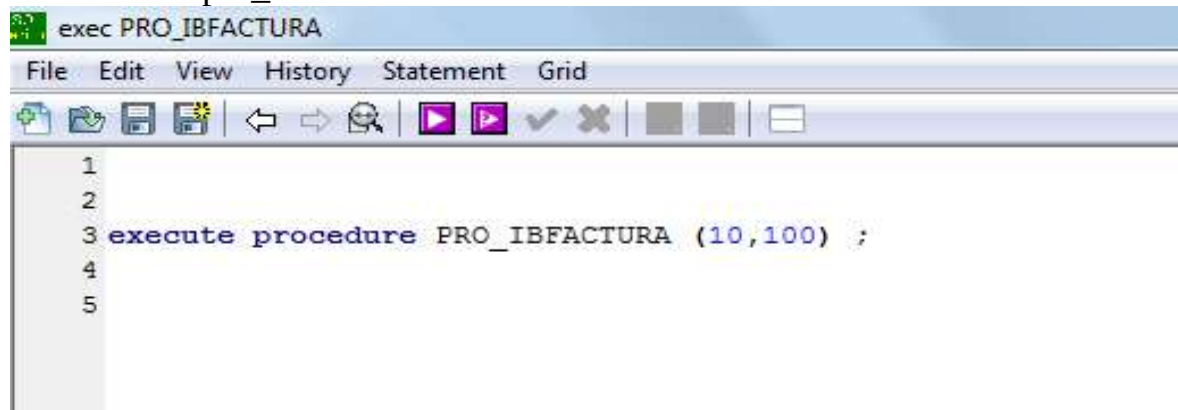


```
1
2
3  GRANT execute ON procedure PRO_IBFACTURA to rol3 ;
4
5
6
```

Disconnect como sysdba

Connect como romer

Probar store pro_ibfactura



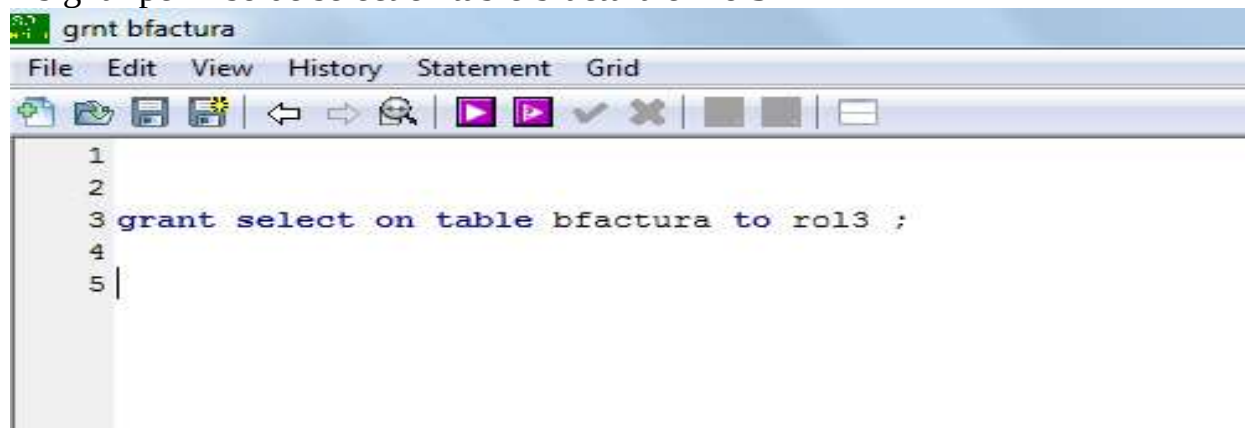
The screenshot shows the SQL Developer interface with the title bar 'exec PRO_IBFACTURA'. The menu bar includes File, Edit, View, History, Statement, and Grid. The toolbar contains icons for file operations, navigation, and execution. The statement editor shows the following SQL code:

```
1  
2  
3 execute procedure PRO_IBFACTURA (10,100) ;  
4  
5
```

Disconnect como romer

Connect como sysdba

Asignar permiso de select en table bfactura en rol3



The screenshot shows the SQL Developer interface with the title bar 'grnt bfactura'. The menu bar includes File, Edit, View, History, Statement, and Grid. The toolbar contains icons for file operations, navigation, and execution. The statement editor shows the following SQL code:

```
1  
2  
3 grant select on table bfactura to rol3 ;  
4  
5
```

Disconnect como sysdba

Connect como romer

Comprobar la ejecución del store procedure pro_ibfactura



The screenshot shows the SQL Developer interface with the title bar 'sel BFACTURA'. The menu bar includes File, Edit, View, History, Statement, and Grid. The toolbar contains icons for file operations, navigation, and execution. The statement editor shows the following SQL code:

```
1  
2 select * from BFACTURA
```

Below the statement editor, the 'Data' tab is selected, displaying the following table:

	NRO	IMPORTE	CI
1	1	100.000000	1
2	2	200.000000	0
3	10	100.000000	0

Comprobar un insert en bfactura con la cláusula INSERT sin usar el store procedure



The screenshot shows a Firebird SQL IDE window titled 'ins BFACTURA'. The main editor displays the following SQL statement:

```
1  
2  
3  INSERT INTO BFACTURA (NRO,IMPORTE)VALUES (20,200) ;  
4  
5  
6  
7
```

The bottom panel shows the 'Statistics' tab with the following error message:

```
Starting transaction...  
Preparing query:  
INSERT INTO BFACTURA (NRO,IMPORTE)VALUES (20,200)  
Error: *** IBPP::SQLException ***  
Context: Statement::Prepare(  
INSERT INTO BFACTURA (NRO,IMPORTE)VALUES (20,200) )  
Message: isc_dsql_prepare failed  
  
SQL Message : -551  
can't format message 13:449 -- message file C:\windows\system32\firebird.msg not found  
  
Engine Code : 335544352  
Engine Message :  
no permission for INSERT access to TABLE BFACTURA  
  
Total execution time: 0.031s
```

Tarea

- 1) Realizar el store procedure para modificar la factura.
- 2) Asignar los permisos necesarios para que el usuario solo pueda modificar la factura ejecutando el store procedure.
- 3) Realizar el store procedure para eliminar una factura.
- 4) Asignar los permisos necesarios para que el usuario solo pueda eliminar la factura ejecutando el store procedure.
- 5) Realizar el store procedure para eliminar un detalle de factura.
- 6) Asignar los permisos necesarios para que el usuario solo pueda eliminar un detalle de la factura ejecutando el store procedure.
- 7) Comprobar el buen funcionamiento de lo hecho.