Bases de Datos 1

Laboratorio 1

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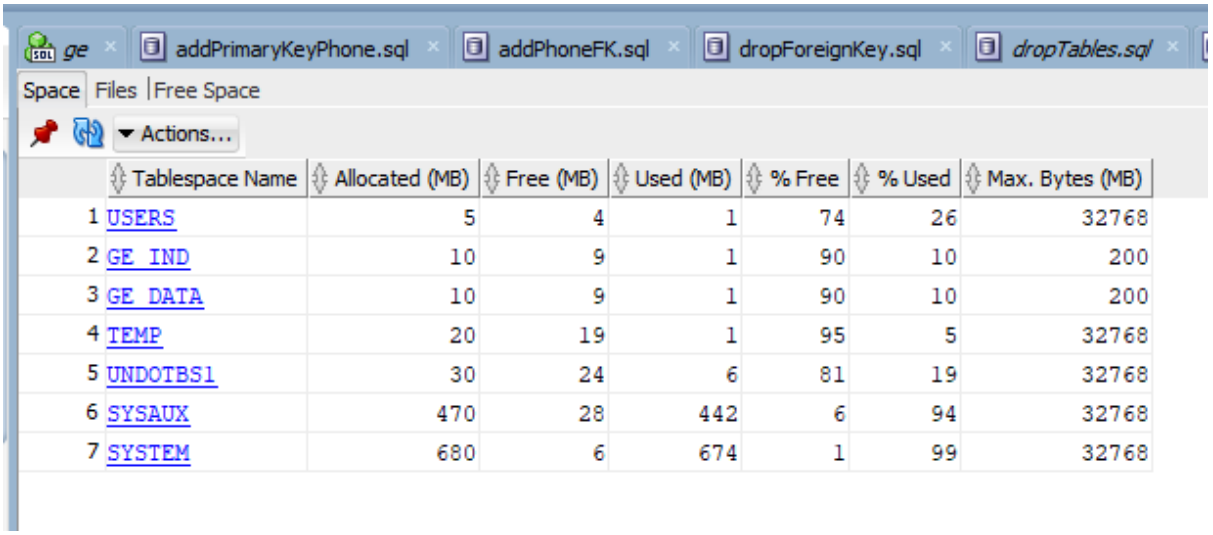
Evidencia Laboratorio 1

Ejercicio 1:

Accediendo desde system a los tablespaces de la base de datos se pueden observar los tablespaces GE_IND y GE_DATA:



ge | addPrimaryKeyPhone.sql | addPhoneFK.sql | dropForeignKey.sql | dropTables.sql

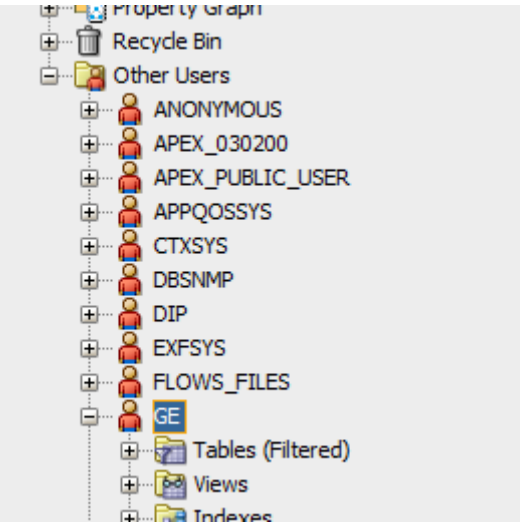
Space | Files | Free Space

Actions...

	Tablespace Name	Allocated (MB)	Free (MB)	Used (MB)	% Free	% Used	Max. Bytes (MB)
1	USERS	5	4	1	74	26	32768
2	GE_IND	10	9	1	90	10	200
3	GE_DATA	10	9	1	90	10	200
4	TEMP	20	19	1	95	5	32768
5	UNDOTBS1	30	24	6	81	19	32768
6	SYSAUX	470	28	442	6	94	32768
7	SYSTEM	680	6	674	1	99	32768

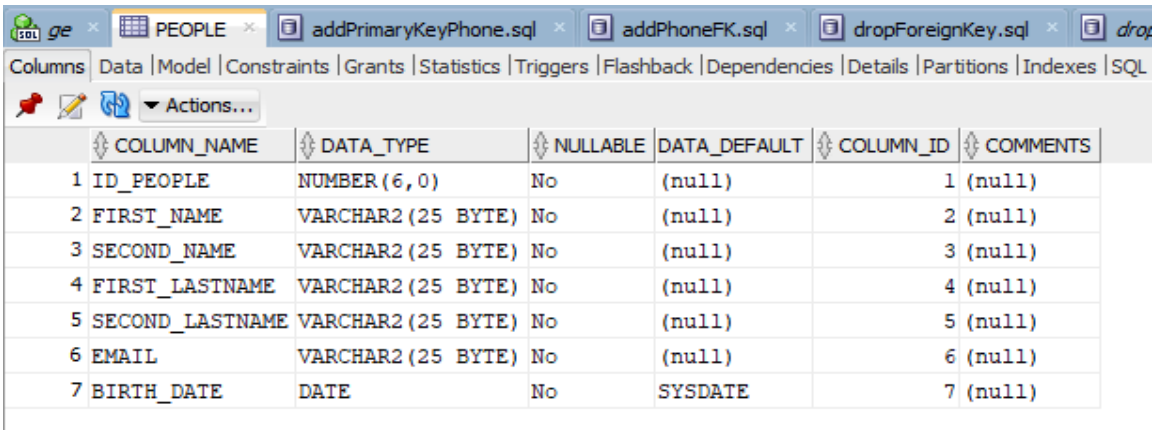
Ejercicio 2:

Mediante el SABD se puede observar el esquema GE creado



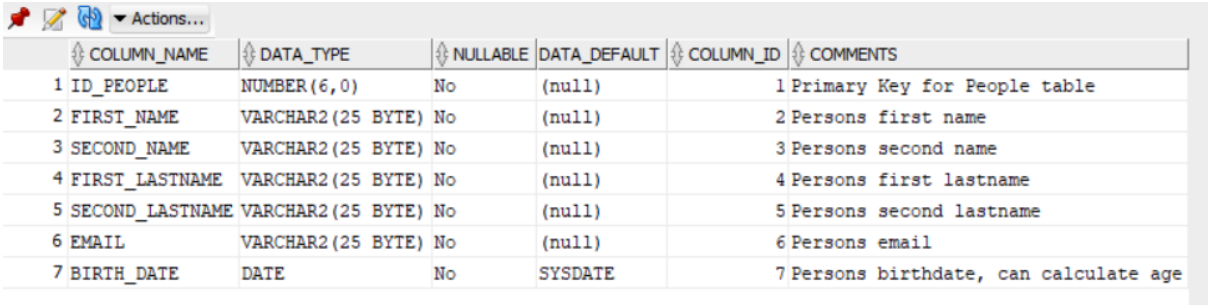
Ejercicio 3:

Tabla People



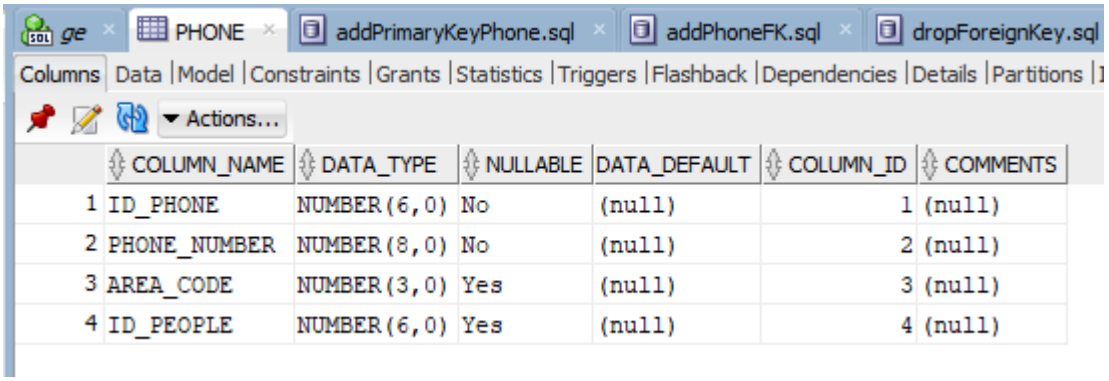
	COLUMN_NAME	DATA_TYPE	NULLABLE	DATA_DEFAULT	COLUMN_ID	COMMENTS
1	ID_PEOPLE	NUMBER(6,0)	No	(null)	1	(null)
2	FIRST_NAME	VARCHAR2(25 BYTE)	No	(null)	2	(null)
3	SECOND_NAME	VARCHAR2(25 BYTE)	No	(null)	3	(null)
4	FIRST_LASTNAME	VARCHAR2(25 BYTE)	No	(null)	4	(null)
5	SECOND_LASTNAME	VARCHAR2(25 BYTE)	No	(null)	5	(null)
6	EMAIL	VARCHAR2(25 BYTE)	No	(null)	6	(null)
7	BIRTH_DATE	DATE	No	SYSDATE	7	(null)

Tabla People comentada



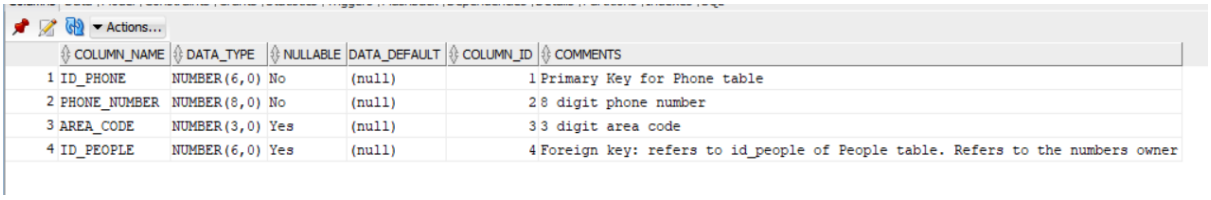
	COLUMN_NAME	DATA_TYPE	NULLABLE	DATA_DEFAULT	COLUMN_ID	COMMENTS
1	ID_PEOPLE	NUMBER(6,0)	No	(null)	1	Primary Key for People table
2	FIRST_NAME	VARCHAR2(25 BYTE)	No	(null)	2	Persons first name
3	SECOND_NAME	VARCHAR2(25 BYTE)	No	(null)	3	Persons second name
4	FIRST_LASTNAME	VARCHAR2(25 BYTE)	No	(null)	4	Persons first lastname
5	SECOND_LASTNAME	VARCHAR2(25 BYTE)	No	(null)	5	Persons second lastname
6	EMAIL	VARCHAR2(25 BYTE)	No	(null)	6	Persons email
7	BIRTH_DATE	DATE	No	SYSDATE	7	Persons birthdate, can calculate age

Tabla Phone:



	COLUMN_NAME	DATA_TYPE	NULLABLE	DATA_DEFAULT	COLUMN_ID	COMMENTS
1	ID_PHONE	NUMBER(6,0)	No	(null)	1	(null)
2	PHONE_NUMBER	NUMBER(8,0)	No	(null)	2	(null)
3	AREA_CODE	NUMBER(3,0)	Yes	(null)	3	(null)
4	ID_PEOPLE	NUMBER(6,0)	Yes	(null)	4	(null)

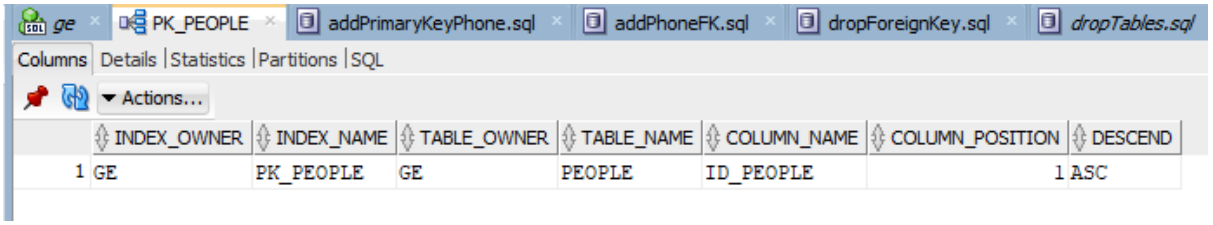
Tabla Phone comentada:



	COLUMN_NAME	DATA_TYPE	NULLABLE	DATA_DEFAULT	COLUMN_ID	COMMENTS
1	ID_PHONE	NUMBER(6,0)	No	(null)	1	Primary Key for Phone table
2	PHONE_NUMBER	NUMBER(8,0)	No	(null)	2	8 digit phone number
3	AREA_CODE	NUMBER(3,0)	Yes	(null)	3	3 digit area code
4	ID_PEOPLE	NUMBER(6,0)	Yes	(null)	4	Foreign key: refers to id_people of People table. Refers to the numbers owner

Ejercicio 4:

Primary Key de tabla People:



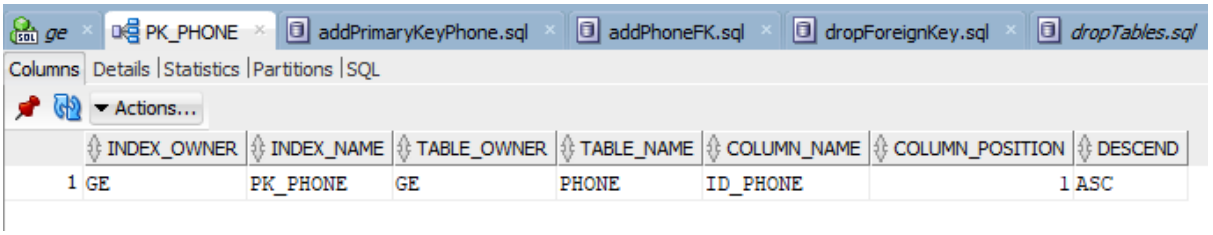
ge | PK_PEOPLE | addPrimaryKeyPhone.sql | addPhoneFK.sql | dropForeignKey.sql | dropTables.sql

Columns | Details | Statistics | Partitions | SQL

Actions...

	INDEX_OWNER	INDEX_NAME	TABLE_OWNER	TABLE_NAME	COLUMN_NAME	COLUMN_POSITION	DESCEND
1	GE	PK_PEOPLE	GE	PEOPLE	ID_PEOPLE	1	ASC

Primary Key de tabla Phone:



ge | PK_PHONE | addPrimaryKeyPhone.sql | addPhoneFK.sql | dropForeignKey.sql | dropTables.sql

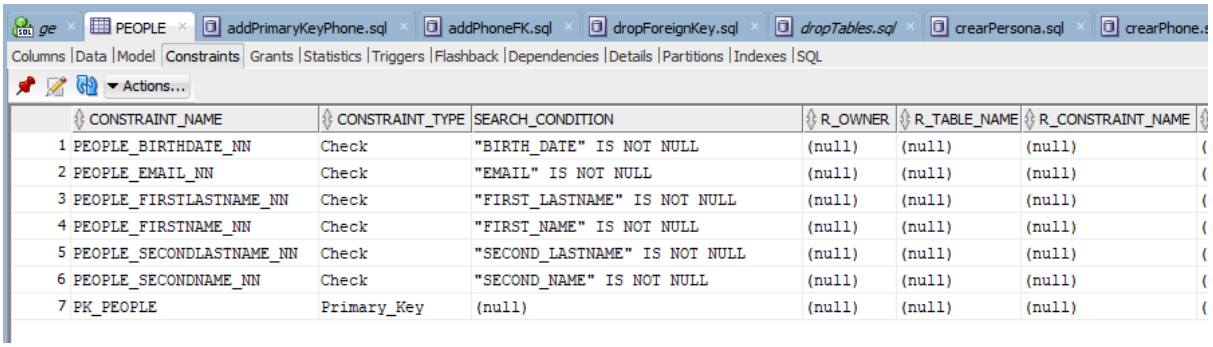
Columns | Details | Statistics | Partitions | SQL

Actions...

	INDEX_OWNER	INDEX_NAME	TABLE_OWNER	TABLE_NAME	COLUMN_NAME	COLUMN_POSITION	DESCEND
1	GE	PK_PHONE	GE	PHONE	ID_PHONE	1	ASC

Ejercicio 5:

Constraints de la tabla People:



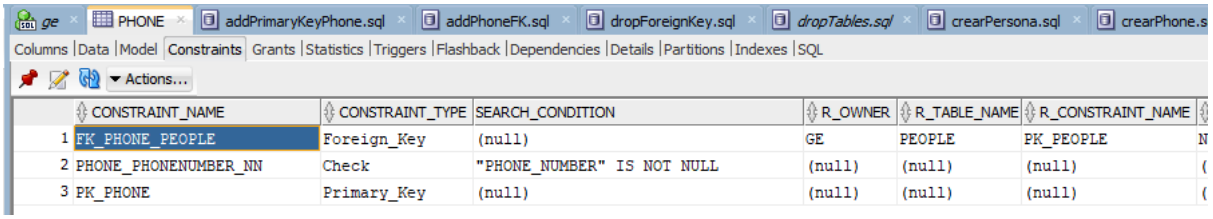
ge | PEOPLE | addPrimaryKeyPhone.sql | addPhoneFK.sql | dropForeignKey.sql | dropTables.sql | crearPersona.sql | crearPhone.s

Columns | Data | Model | Constraints | Grants | Statistics | Triggers | Flashback | Dependencies | Details | Partitions | Indexes | SQL

Actions...

	CONSTRAINT_NAME	CONSTRAINT_TYPE	SEARCH_CONDITION	R_OWNER	R_TABLE_NAME	R_CONSTRAINT_NAME
1	PEOPLE_BIRTHDATE_NN	Check	"BIRTH_DATE" IS NOT NULL	(null)	(null)	(null)
2	PEOPLE_EMAIL_NN	Check	"EMAIL" IS NOT NULL	(null)	(null)	(null)
3	PEOPLE_FIRSTLASTNAME_NN	Check	"FIRST_LASTNAME" IS NOT NULL	(null)	(null)	(null)
4	PEOPLE_FIRSTNAME_NN	Check	"FIRST_NAME" IS NOT NULL	(null)	(null)	(null)
5	PEOPLE_SECONDLASTNAME_NN	Check	"SECOND_LASTNAME" IS NOT NULL	(null)	(null)	(null)
6	PEOPLE_SECONDNAME_NN	Check	"SECOND_NAME" IS NOT NULL	(null)	(null)	(null)
7	PK_PEOPLE	Primary_Key	(null)	(null)	(null)	(null)

Constraints de tabla Phone:



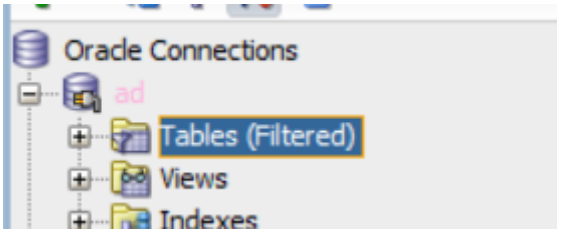
ge | PHONE | addPrimaryKeyPhone.sql | addPhoneFK.sql | dropForeignKey.sql | dropTables.sql | crearPersona.sql | crearPhone.s

Columns | Data | Model | Constraints | Grants | Statistics | Triggers | Flashback | Dependencies | Details | Partitions | Indexes | SQL

Actions...

	CONSTRAINT_NAME	CONSTRAINT_TYPE	SEARCH_CONDITION	R_OWNER	R_TABLE_NAME	R_CONSTRAINT_NAME
1	FK_PHONE_PEOPLE	Foreign_Key	(null)	GE	PEOPLE	PK_PEOPLE
2	PHONE_PHONENUMBER_NN	Check	"PHONE_NUMBER" IS NOT NULL	(null)	(null)	(null)
3	PK_PHONE	Primary_Key	(null)	(null)	(null)	(null)

Ejercicio 6:



Ejercicio 7:

Tabla People y sus constraints

Actions...

	COLUMN_NAME	DATA_TYPE	NULLABLE	DATA_DEFAULT	COLUMN_ID	COMMENTS
1	ID_PEOPLE	NUMBER(6,0)	No	(null)	1	(null)
2	FIRST_NAME	VARCHAR2(25 BYTE)	No	(null)	2	(null)
3	SECOND_NAME	VARCHAR2(25 BYTE)	No	(null)	3	(null)
4	FIRST_LASTNAME	VARCHAR2(25 BYTE)	No	(null)	4	(null)
5	SECOND_LASTNAME	VARCHAR2(25 BYTE)	No	(null)	5	(null)
6	EMAIL	VARCHAR2(25 BYTE)	No	(null)	6	(null)
7	BIRTH_DATE	DATE	No	SYSDATE	7	(null)

Actions...

	CONSTRAINT_NAME	CONSTRAINT_TYPE	SEARCH_CONDITION	R_OWNER	R_TABLE_NAME
1	PEOPLE_BIRTHDATE_NN	Check	"BIRTH_DATE" IS NOT NULL	(null)	(null)
2	PEOPLE_EMAIL_NN	Check	"EMAIL" IS NOT NULL	(null)	(null)
3	PEOPLE_FIRSTLASTNAME_NN	Check	"FIRST_LASTNAME" IS NOT NULL	(null)	(null)
4	PEOPLE_FIRSTNAME_NN	Check	"FIRST_NAME" IS NOT NULL	(null)	(null)
5	PEOPLE_SECONDLASTNAME_NN	Check	"SECOND_LASTNAME" IS NOT NULL	(null)	(null)
6	PEOPLE_SECONDNAME_NN	Check	"SECOND_NAME" IS NOT NULL	(null)	(null)
7	PK_PEOPLE	Primary_Key	(null)	(null)	(null)

Tabla People comentada:

Actions...

	COLUMN_NAME	DATA_TYPE	NULLABLE	DATA_DEFAULT	COLUMN_ID	COMMENTS
1	ID_PEOPLE	NUMBER(6,0)	No	(null)	1	Primary Key for People table
2	FIRST_NAME	VARCHAR2(25 BYTE)	No	(null)	2	Clients first name
3	SECOND_NAME	VARCHAR2(25 BYTE)	No	(null)	3	Clients second name
4	FIRST_LASTNAME	VARCHAR2(25 BYTE)	No	(null)	4	Clients first lastname
5	SECOND_LASTNAME	VARCHAR2(25 BYTE)	No	(null)	5	Clients second lastname
6	EMAIL	VARCHAR2(25 BYTE)	No	(null)	6	Clients personal email
7	BIRTH_DATE	DATE	No	SYSDATE	7	Clients birth date. Can calculate age from it

Tabla Grocery y sus constraints

Actions...

	COLUMN_NAME	DATA_TYPE	NULLABLE	DATA_DEFAULT	COLUMN_ID	COMMENTS
1	ID_GROCERY	NUMBER(6,0)	No	(null)	1	(null)
2	TYPE_GROCERY	VARCHAR2(25 BYTE)	No	(null)	2	(null)
3	AMOUNT	NUMBER(6,0)	No	(null)	3	(null)
4	ID_ORDER	NUMBER(6,0)	Yes	(null)	4	(null)
5	ID_PRICE	NUMBER(6,0)	Yes	(null)	5	(null)

Actions...

	CONSTRAINT_NAME	CONSTRAINT_TYPE	SEARCH_CONDITION	R_OWNER	R_TABLE_NAME	R_CONSTRAINT_NAME
1	FK_GROCERY_ORDER	Foreign_Key	(null)	AD	ORDERG	PK_ORDERG
2	FK_GROCERY_PRICE	Foreign_Key	(null)	AD	PRICE	PK_PRICE
3	GROCERY_AMOUNT_NN	Check	"AMOUNT" IS NOT NULL	(null)	(null)	(null)
4	PK_GROCERY	Primary_Key	(null)	(null)	(null)	(null)
5	TYPE_GROCERY_NN	Check	"TYPE_GROCERY" IS NOT NULL	(null)	(null)	(null)

Tabla Grocery comentada:

	COLUMN_NAME	DATA_TYPE	NULLABLE	DATA_DEFAULT	COLUMN_ID	COMMENTS
1	ID_GROCERY	NUMBER(6,0)	No	(null)	1	Primary Key for Grocery table
2	TYPE_GROCERY	VARCHAR2(25 BYTE)	No	(null)	2	Text for the specific type of grocery. Must be unique for each Grocery
3	AMOUNT	NUMBER(6,0)	No	(null)	3	Number for the amount of single grocery that is being purchased
4	ID_ORDER	NUMBER(6,0)	Yes	(null)	4	Foreign Key: refers to id_orderG of table orderG
5	ID_PRICE	NUMBER(6,0)	Yes	(null)	5	Foreign Key: refers to id_price of table price

Tabla OrderG y sus constraints (se utilizó el nombre OrderG, “G” de groceries, para evitar utilizar la palabra reservada ORDER)

Actions...

	COLUMN_NAME	DATA_TYPE	NULLABLE	DATA_DEFAULT	COLUMN_ID	COMMENTS
1	ID_ORDERG	NUMBER(6,0)	No	(null)	1	(null)
2	TOTAL_COST	NUMBER(10,0)	No	(null)	2	(null)
3	TOTAL_GROCERIES	NUMBER(10,0)	No	(null)	3	(null)
4	ID_PEOPLE	NUMBER(6,0)	Yes	(null)	4	(null)

Columns | Data | Model | Constraints | Grants | Statistics | Triggers | Flashback | Dependencies | Details | Partitions | Indexes | SQL

Actions...

	CONSTRAINT_NAME	CONSTRAINT_TYPE	SEARCH_CONDITION	R_OWNER	R_TABLE_NAME	R_CONSTRAINT_NAME
1	FK_ORDER_PEOPLE	Foreign_Key	(null)	AD	PEOPLE	PK_PEOPLE
2	ORDER_COST_NN	Check	"TOTAL_COST" IS NOT NULL	(null)	(null)	(null)
3	ORDER_TOTAL_NN	Check	"TOTAL_GROCERIES" IS NOT NULL	(null)	(null)	(null)
4	PK_ORDERG	Primary_Key	(null)	(null)	(null)	(null)

Tabla OrderG comentada:

Actions...

	COLUMN_NAME	DATA_TYPE	NULLABLE	DATA_DEFAULT	COLUMN_ID	COMMENTS
1	ID_ORDERG	NUMBER(6,0)	No	(null)	1	Primary Key for OrderG table
2	TOTAL_COST	NUMBER(10,0)	No	(null)	2	Sum total of the cost of all the Groceries in the order
3	TOTAL_GROCERIES	NUMBER(10,0)	No	(null)	3	Sum total of the amount of Groceries in the order
4	ID_PEOPLE	NUMBER(6,0)	Yes	(null)	4	Foreign key: refers to id_people from People table

Tabla Price y sus constraints:

Actions...

	COLUMN_NAME	DATA_TYPE	NULLABLE	DATA_DEFAULT	COLUMN_ID	COMMENTS
1	ID_PRICE	NUMBER(6,0)	No	(null)	1	(null)
2	COST	NUMBER(25,0)	No	(null)	2	(null)
3	CURRENCY	VARCHAR2(10 BYTE)	No	(null)	3	(null)

	CONSTRAINT_NAME	CONSTRAINT_TYPE	SEARCH_CONDITION	R_OWNER	R_TABLE_NAME	R_CONSTRAINT_NAME
1	PK_PRICE	Primary_Key	(null)	(null)	(null)	(null)
2	PRICE_COST_NN	Check	"COST" IS NOT NULL	(null)	(null)	(null)
3	PRICE_CURRENCY_NN	Check	"CURRENCY" IS NOT NULL	(null)	(null)	(null)

Tabla Price comentada:

Actions...

	COLUMN_NAME	DATA_TYPE	NULLABLE	DATA_DEFAULT	COLUMN_ID	COMMENTS
1	ID_PRICE	NUMBER(6,0)	No	(null)	1	Primary Key for Price table
2	COST	NUMBER(25,0)	No	(null)	2	Monetary cost of specific Grocery
3	CURRENCY	VARCHAR2(10 BYTE)	No	(null)	3	Currency for the cost of Grocery

Ejercicio 8:

Tabla Grocery original

	COLUMN_NAME	DATA_TYPE	NULLABLE	DATA_DEFAULT	COLUMN_ID	COMMENTS
1	ID_GROCERY	NUMBER(6,0)	No	(null)	1	Primary Key for Grocery table
2	TYPE_GROCERY	VARCHAR2(25 BYTE)	No	(null)	2	Text for the specific type of grocery. Must be unique for each Grocery
3	AMOUNT	NUMBER(6,0)	No	(null)	3	Number for the amount of single grocery that is being purchased
4	ID_ORDER	NUMBER(6,0)	Yes	(null)	4	Foreign Key: refers to id_orderG of table orderG
5	ID_PRICE	NUMBER(6,0)	Yes	(null)	5	Foreign Key: refers to id_price of table price

Tabla Grocery modificada:

Actions...

	COLUMN_NAME	DATA_TYPE	NULLABLE	DATA_DEFAULT	COLUMN_ID	COMMENTS
1	ID_GROCERY	NUMBER(6,0)	No	(null)	1	Primary Key for Grocery table
2	TYPE_OF_GROCERY	VARCHAR2(25 BYTE)	No	(null)	2	Text for the specific type of grocery. Must be unique for each Grocery
3	AMOUNT_GROCERY	NUMBER(6,0)	No	(null)	3	Number for the amount of single grocery that is being purchased
4	ID_ORDER	NUMBER(6,0)	Yes	(null)	4	Foreign Key: refers to id_orderG of table orderG
5	ID_PRICE	NUMBER(6,0)	Yes	(null)	5	Foreign Key: refers to id_price of table price

Ejercicio 9:

Tabla People original:

Actions...

	COLUMN_NAME	DATA_TYPE	NULLABLE	DATA_DEFAULT	COLUMN_ID	COMMENTS
1	ID_PEOPLE	NUMBER(6,0)	No	(null)	1	Primary Key for People table
2	FIRST_NAME	VARCHAR2(25 BYTE)	No	(null)	2	Clients first name
3	SECOND_NAME	VARCHAR2(25 BYTE)	No	(null)	3	Clients second name
4	FIRST_LASTNAME	VARCHAR2(25 BYTE)	No	(null)	4	Clients first lastname
5	SECOND_LASTNAME	VARCHAR2(25 BYTE)	No	(null)	5	Clients second lastname
6	EMAIL	VARCHAR2(25 BYTE)	No	(null)	6	Clients personal email
7	BIRTH_DATE	DATE	No	SYSDATE	7	Clients birth date. Can calculate age from it

Tabla People con first_name modificado:

Actions...

	COLUMN_NAME	DATA_TYPE	NULLABLE	DATA_DEFAULT	COLUMN_ID	COMMENTS
1	ID_PEOPLE	NUMBER(6,0)	No	(null)	1	Primary Key for People table
2	FIRST_NAME	VARCHAR2(50 BYTE)	No	(null)	2	Clients first name
3	SECOND_NAME	VARCHAR2(25 BYTE)	No	(null)	3	Clients second name
4	FIRST_LASTNAME	VARCHAR2(25 BYTE)	No	(null)	4	Clients first lastname
5	SECOND_LASTNAME	VARCHAR2(25 BYTE)	No	(null)	5	Clients second lastname
6	EMAIL	VARCHAR2(25 BYTE)	No	(null)	6	Clients personal email
7	BIRTH_DATE	DATE	No	SYSDATE	7	Clients birth date. Can calculate age from it