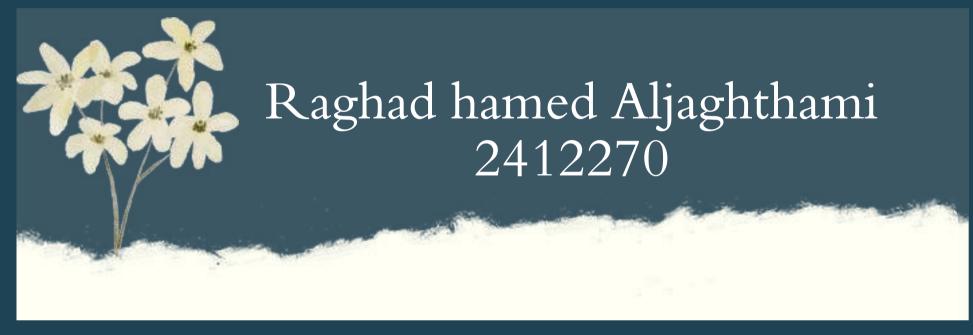
Air line Database Management System

DATABASE PROJECT



MEMBERS OF THE GROUP





Alyan Alhazzani 2411889





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- 3. List of entities
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Project Schedule

Responsible member	Task
Reemaalahmari	 List of entities Er Diagram The tables afterdata population Queries
Maather AlQarni	Logical modellingThe inserting
Raghad Hamed Aljaghthami	 normalization functional dependencies Creating table, add consraint and altering table
Alyan Alhazzani	 Relationship Relationschema Queries Procedure

Description

What Is The Idea Of The Project?

Saudi Airlines need to maintain an archive. This project will be a database for Saudi Airlines, in which there will be passengers, flights, airplane and airport.

Problem description:

In this period of time, online service become widely spread. The main problems we face in our normal airline management system was that there is many data problems because of duplication of data and so on. Also, passenger have to sign his information too many times to different departments when booking a flight result to lack of logical relationships between departments which we have in database concept, that long process lead to decrease in sales.

Passenger Rules

- Ticket belong only to one passenger
- Passenger may book many tickets or not
- One or many tickets belong to specific flight
- Flight must have one and only one airplane
- Airplane may have a flight
- One or many airplanes Can translate in one or many airports

List Of Entities



Relationships

Passenger, Ticket

Ticket belong only to one passenger (One to one relationship's)

Ticket,Flight
One or many tickets belong to specific flight
(many to one relationship's)
Flight ,Airplane

Flight must have one and only one airplane (One to one relationship's)

Airplane, airport

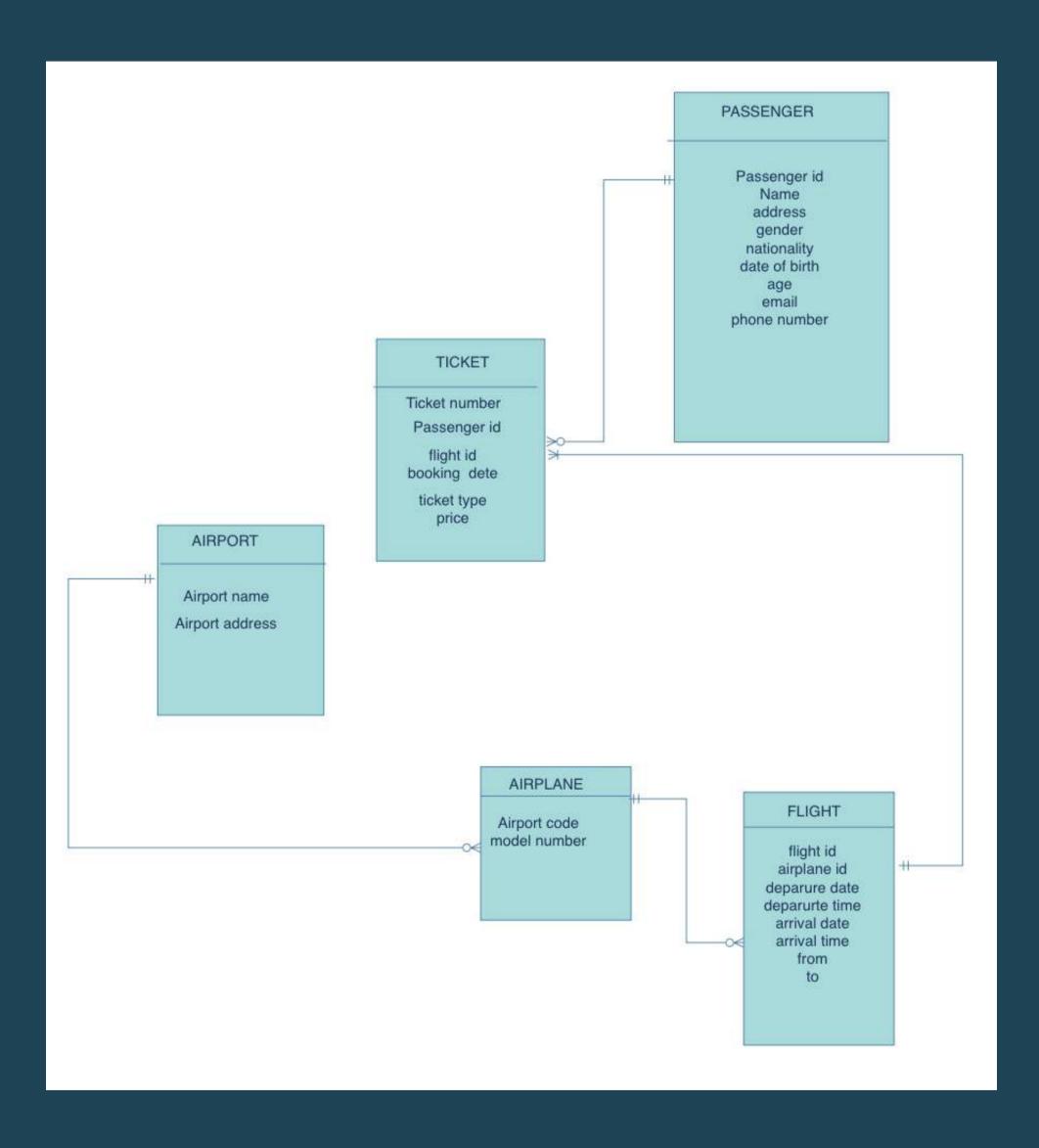
One or many airplanes Can translate in one or many airports

(many to many relationship's)

Table Name	Attribute	Data Type	Data Description
Passenger	Passenger ID Name Phone Email	Single&simplePK Simple simple simple	Passenger name have the name and phone and the email
Ticket	Ticket number Passenger ID Flight ID Price	Simple Single&simpleFK Single&simplePK Simple	The ticket number The ID number of passenger and flight ID The price
Airport	Airport name Airport address	Simple Composite	The airport and the address of airport
Airplane	Airport code Simple Model number Simple		The airport code and the model number
Flight	Flight ID Airplane ID Arrival date	Single&simplePK Single&simplePK Simple	The flight ID and airplane ID and date of arrival



Logical modelling



Functional Dependencies

Passinger_ID -----

F_name,M_name,L_name, city,state,street_address, postal_code,gender, nationality,date_of_birth, age,email,phone_number

Flight_ID ____

Airplane_ID _____

Airport_code, model_number

Airplane_ID ----->

Airport_name,city,state, street_address, postal_code

All the tables are in 1NF, 2NF, 3NF are Normalized

- in 1NF: all relations in 1NF because no repeating groups (atomic)
- in 2NF: all relations in 2NF because no partial dependency
- in 3NF: all relations in 3NF because no transitive dependencies

Passenger

Attribute	Data Type Constraint		Description
Passenger_id	Varchar(10)	Primary key	Take nationality id from the user
F_name	Varchar(10)	Not null	take the first name from the user
M_name	Varchar(10)	Not null	take the middle name from the user
L_name	Varchar(10)	Not null	take the last name from the user
City	Varchar(25)	Not null	take the city name from the user
State	Varchar(9)	Not null	take the state name from the user
Street_address	Varchar(20)	Not null	take the street address from the user
Postal_code	Varchar(5)	Not null	take the number of postal code from the user
Gender	Varchar(6)	Not null	Female or Male
Nationality	Varchar(15)	Not null	user Nationality
Date_of_Birth	DATE	Not null	Date of birth of the user
age	Number(3)	Not null user age	
Email	Varchar(25)	Not null	user email
Phone_num	Varchar(10)	Not null	user phone number

Ticket

Attribute	Data Type Constraint		Description	
Ticket_num	Varchar(5)	Primary key	holds ticket number	
Passenger_id	Varchar(10)	Foreign key	holds user id	
Flight_id	Varchar(5)	Foreign key	holds user id	
Booking_date	TIMESTAMP(6)	Not null	holds booking date from system	
Ticket_type	Varchar(10)	Not null	holds ticket class	
Price	Number(10)	Not null	holds ticket price	
Tax	Number(4)	Not null	holds tax	

Flight

Attribute	ribute Data Type Constraint		Description
Flight_id	Varchar(5)	Varchar(5) Primary key	
Airplane_id	Varchar(5)	Foreign key	holds Airplane id
DeparureDate	Varchar(5)	Not null	holds Deparure Date
Deparure Time	Varchar(10)	Not null	holds Deparure Time
Arrivaldate	Varchar(10)	Not null	holds Arrival Date
Arrivaltime	Varchar(10)	Not null	holds Arrival time
From_	Varchar(10)	archar(10) Not null plane wil	
To_	Varchar(10)	Not null	Holds from where the plane will land

Airplane

Attribute	Data Type	Constraint	Description
Airplane_id	Varchar(5)	Primary key	Holds Airplane id
model_num	Varchar(5)	Not null	Holds the model number of plane

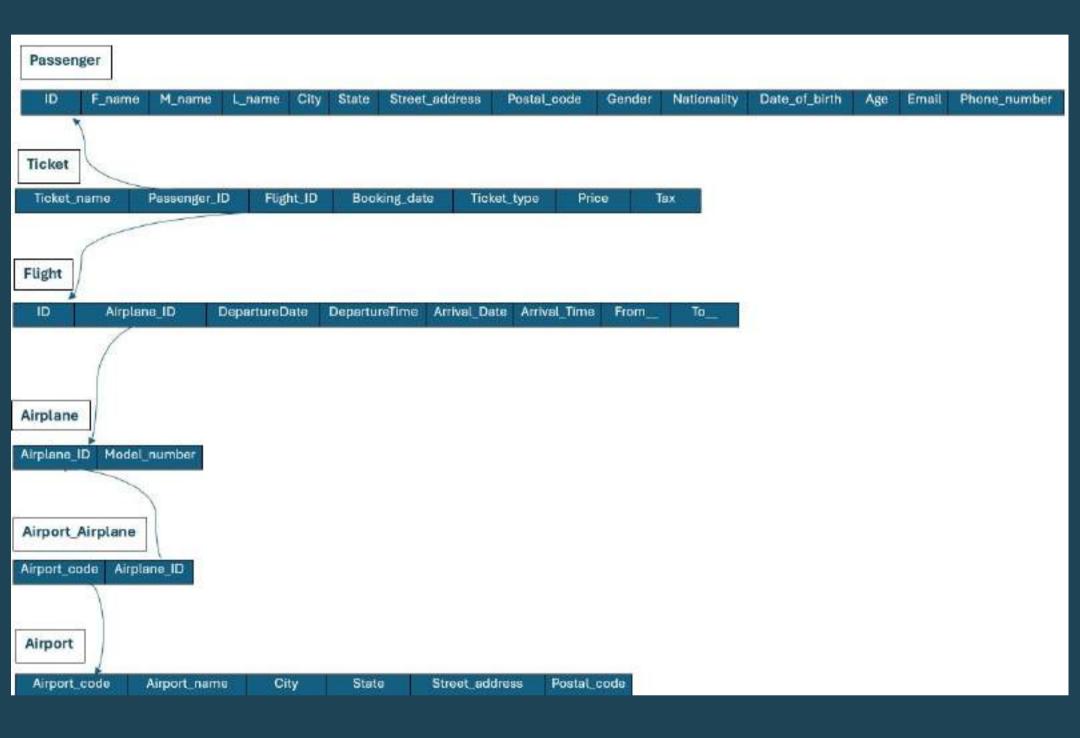
Airport_Airplane

Attribute	Data Type	Constraint	Description
Airplane_code	Varchar(5)	Primary key - foreign key	Holds Airport code
Airplane_id	Varchar(5)	Primary key - Foreign key	Holds Airplane id

Airport

Attribute	Data Type	Constraint	Description
Airport_code	Varchar(5)	Primary key	Holds Airport code
Airport_name	Varchar(20) Not null		Holds Airport name
City	Varchar(15)	Not null	Holds Airport's city
State	Varchar(9)	Not null	Holds Airport's state
Street_address	Varchar(20) Not null		Holds Airport' street address
Postal_code	Number(5)	Not null	Holds Airport's postal code

Relation Schema



```
CREATE TABLE PASSENGER (
 1 v
         passenger id VARCHAR2(10)NOT NULL,
 2
         f name VARCHAR2(10)NOT NULL,
 3
         m name VARCHAR2(10)NOT NULL,
 4
 5
         1 name VARCHAR2(10)NOT NULL,
         city VARCHAR2(25)NOT NULL,
 6
         state VARCHAR2(9)NOT NULL,
 7
         street address VARCHAR2(20)NOT NULL,
 8
         postal code VARCHAR2(5)NOT NULL,
 9
         gender VARCHAR2(6)NOT NULL,
10
         nationality VARCHAR2(15)NOT NULL,
11
         date of birth date NOT NULL,
12
13
         age NUMBER(3)NOT NULL,
         email VARCHAR2(25)NOT NULL,
14
         phone num VARCHAR2(10)NOT NULL,
15
         CONSTRAINT PK passenger PRIMARY KEY(passenger id));
16
```

Table created.

Table/View Finder

Table PASSENGER

Column	Туре	Length	Precision	Scale	Nullable
	.,,,,,				
PASSENGER_ID	VARCHAR2	10			No
F_NAME	VARCHAR2	10			No
M_NAME	VARCHAR2	10			No
L_NAME	VARCHAR2	10			No
CITY	VARCHAR2	25			No
STATE	VARCHAR2	9			No
STREET_ADDRESS	VARCHAR2	20			No
POSTAL_CODE	VARCHAR2	5			No
GENDER	VARCHAR2	6			No
NATIONALITY	VARCHAR2	15			No
DATE_OF_BIRTH	DATE	7			No
AGE	NUMBER	22	3	0	No
EMAIL	VARCHAR2	25			No
PHONE NUM	VARCHAR2	10			No



```
1    CREATE TABLE AIRPLANE (
2     airplane_id VARCHAR2(5)NOT NULL,
3     model_num VARCHAR2(5)NOT NULL,
4     CONSTRAINT PK_airplane_id PRIMARY KEY (airplane_id));
```

Table created.

Table **AIRPLANE**

Column	Туре	Length	Precision	Scale	Nullable
AIRPLANE_ID	VARCHAR2	5			No
MODEL_NUM	VARCHAR2	5			No

Table created.

Table **AIRPORT**

Column	Туре	Length	Precision	Scale	Nullable
AIRPORT_CODE	VARCHAR2	5			No
AIRPORT_NAME	VARCHAR2	20			No
CITY	VARCHAR2	15			No
STATE	VARCHAR2	9			No
STREET_ADDRESS	VARCHAR2	20			No
POSTAL_CODE	NUMBER	22	5	0	No

```
1   CREATE TABLE AIRPORT_AIRPLANE (
2   airport_code VARCHAR2 (5)NOT NULL,
3   airplane_id VARCHAR2 (5)NOT NULL,
4   PRIMARY KEY (airport_code,airplane_id));
5
```

Table created.

Table **AIRPORT_AIRPLANE**

Column	Туре	Length	Precision	Scale	Nullable
AIRPORT_CODE	VARCHAR2	5			No
AIRPLANE_ID	VARCHAR2	5			No

```
ALTER TABLE AIRPORT_AIRPLANE
ADD FOREIGN KEY (airport_code) REFERENCES AIRPORT (airport_code);
ALTER TABLE AIRPORT_AIRPLANE
ADD FOREIGN KEY (airplane_id) REFERENCES AIRPLANE (airplane_id);

5
```

Table altered.

Table altered.

```
CREATE TABLE FLIGHT (
 1 <sub>v</sub>
         flight_id VARCHAR2(5)NOT NULL,
 2
 3
         airplane id VARCHAR2(5)NOT NULL,
         departreDate VARCHAR2(10)NOT NULL,
 4
          departureTime VARCHAR2(10)NOT NULL,
          arrivalDate VARCHAR2(10)NOT NULL,
 6
          arrivalTime VARCHAR2(10)NOT NULL,
7
        from VARCHAR2(10)NOT NULL,
8
        to VARCHAR2(10)NOT NULL,
9
    CONSTRAINT PK flight id PRIMARY KEY (flight id));
10
```

Table created.

1 v ALTER TABLE FLIGHT

ADD FOREIGN KEY (airplane_id) REFERENCES AIRPLANE (airplane_id);

Table altered.

Table **FLIGHT**

Column	Туре	Length	Precision	Scale	Nullable
FLIGHT_ID	VARCHAR2	5			No
AIRPLANE_ID	VARCHAR2	5			No
DEPARUREDATE	VARCHAR2	10			No
DEPARURETIME	VARCHAR2	10			No
ARRIVALDATE	VARCHAR2	10			No
ARRIVALTIME	VARCHAR2	10			No
FROM_	VARCHAR2	10			No
TO_	VARCHAR2	10			No

```
CREATE TABLE TICKET (
 1 ,
        ticket_num VARCHAR2(5)NOT NULL,
 2
        passenger_id VARCHAR2(10)NOT NULL,
 3
        flight id VARCHAR2(5)NOT NULL,
 4
        booking date TIMESTAMP(6)NOT NULL,
 5
        ticket type VARCHAR2(10)NOT NULL,
 6
        price NUMBER(10)NOT NULL,
 7
        tax NUMBER(4)NOT NULL,
 8
        CONSTRAINT PK_ticket_num PRIMARY KEY (ticket_num));
 9
10
11 , ALTER TABLE TICKET
    ADD FOREIGN KEY (passenger_id) REFERENCES PASSENGER(passenger_id);
12
13 , ALTER TABLE TICKET
    ADD FOREIGN KEY (flight_id) REFERENCES FLIGHT(flight_id);
14
15
Table created.
```

Table altered.

Table altered.

Table **TICKET**

Column	Туре	Length	Precision	Scale	Nullable
TICKET_NUM	VARCHAR2	5			No
PASSENGER_ID	VARCHAR2	10			No
FLIGHT_ID	VARCHAR2	5			No
BOOKING_DATE	TIMESTAMP(6)	11		6	No
TICKET_TYPE	VARCHAR2	10			No
PRICE	NUMBER	22	10	0	No
TAX	NUMBER	22	4	0	No

The inserting

```
SQL Worksheet
                                                                                                             Actions v
SOL Worksheet
                                insert into airport values ('A222', 'makkah airport', 'makkah', 'makkah', 'Airport road', 56700);

    My Session

                               insert into airport values ('A333' ,'Taif airport', 'Taif', 'makkah', 'Airport road',56701);
Schema
                                insert into airport values ('A444', 'prince nayef', 'Buraydah', 'Qassim', 'Airport road', 56756);

<sup>▶</sup> Quick SQL

                               /*Riyadh airport */
                           10
                              insert into airport values ('Alll', 'king khalid', 'Riyadh', 'Riyadh', 'Airport road',56733);
                           11
My Scripts
                           12
                               /*Riyadh - Dubai*/
                           14
My Tutorials
                              insert into airplane values ('P666', '30ZX');
                           15
出 Code Library
                           17
                               insert into airport_airplane values ('All1', 'P666');
                           18
                               insert into flight values('F111', 'P666', '17-12-2021', '06:00 PM', '17-12-2021', '07:50 PM', 'RIYADH', 'Dui
                           20
                          1 row(s) inserted.
                          1 row(s) inserted.
                          1 row(s) inserted.
                          1 row(s) inserted.
                          1 row(s) inserted.
```

```
SQL Worksheet
                                                                                                          Actions *
SQL Worksheet
                          22 /*passenger ticket */
                          23
                          24 insert into PASSENGER values ('1122334455', 'Shadin', 'Ahmed', 'Alharbi', 'Riyadh', 'Riyadh',

■ My Session

                          25 'Alnada',56733,'female', 'saudi', DATE'1995-05-12', 26, 'shadin54@gmail.com','0549919109');
                          26 insert into ticket values ('t112', '1122334455', 'F111', CURRENT_TIMESTAMP, 'Bussines', 1000, 150);
Schema
                          27
                          28 insert into PASSENGER values ('2211334455', 'Reeman', 'Hamid', 'Alharbi', 'Riyadh', 'Riyadh',
                          29 'Al Rimal' ,56730 , 'female' , 'saudi', DATE '2001-10-1', 20, 'Reemanhh@gmail.com','0549122575');

→ Quick SQL

                          30 insert into ticket values ('t113', '2211334455', 'F111', CURRENT_TIMESTAMP, 'Bussines', 1000, 150);
                          31
                          32 insert into PASSENGER values ('3311224455', 'Khalid', 'yousef', 'Albeladi', 'Riyadh', 'Riyadh',
My Scripts
                          33 'Alnada',56733, 'male', 'saudi', DATE '1990-12-15', 30, 'khalid_hh@gmail.com', '0545759864');
                          34 insert into ticket values ('t114', '3311224455', 'F111', CURRENT_TIMESTAMP, 'Economy', 800, 120);
My Tutorials
                          36 insert into PASSENGER values ('4411223355', 'Jumanah', 'Hamad', 'alghamdi', 'Riyadh', 'Riyadh',
                          37 'Alnada',56733, 'female', 'saudi', DATE '1982-5-07', 38, 'jh_77@gmail.com','0555759878');
出 Code Library
                          38
                          39 /*Riyadh -- Kuwait */
                          40 insert into airplane values ('F990', '37Ew');
                          41 insert into airport_airplane values ('A111', 'F990');
                         1 row(s) inserted.
                         1 row(s) inserted.
                         1 row(s) inserted.
                         1 row(s) inserted.
                         1 row(s) inserted.
```

The inserting

```
₩ Home
                           SQL Worksheet

    Clear

                                                                                                            Actions ~
SQL Worksheet
                          43
                           44
                               /*passenger ticket */
                          45

■ My Session

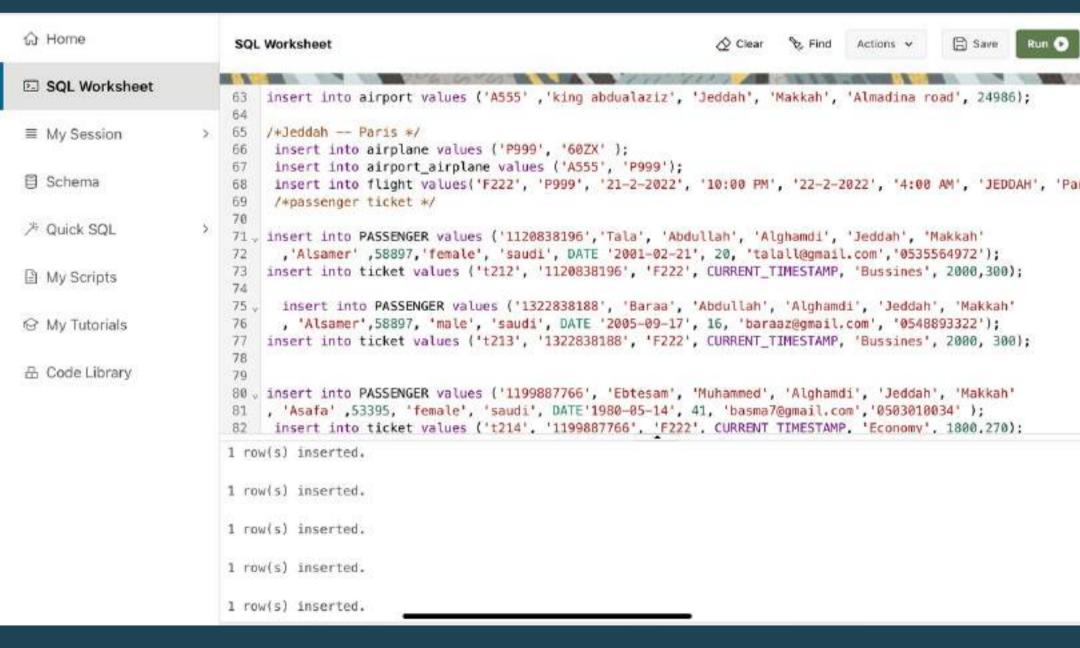
                               insert into PASSENGER values ('1538296538', 'Hala', 'Ahmed', 'Alsairafi', 'Riyadh', 'Riyadh'
                           46 .
                                ,'Alrabwah',17744, 'female', 'saudi', DATE'1977-01-31', 44, 'halaty6@gmail.com', '0543279980');

☐ Schema

                          48
                               insert into ticket values ('c115', '1538296538', 'Q633', CURRENT_TIMESTAMP, 'Economy ',900,135);
                           49
                          50 .
                               insert into PASSENGER values ('1876644721', 'Jana', 'Ahmed', 'Almutairi', 'Riyadh', 'Riyadh'
2 Quick SQL
                               , 'Almarwah',56733, 'female' ,'saudi', DATE'1999-04-22', 22, 'jana54@gmail.com', '0543217768');
                               insert into ticket values ('c116', '1876644721', 'Q633', CURRENT_TIMESTAMP, 'Bussines', 1200,180);
                          53
My Scripts
                           54 insert into PASSENGER values ('1110384712', 'Yara', 'khalid', 'Alanani', 'Riyadh', 'Riyadh',
                               'Almanar', 87551, 'female', 'saudi', DATE '1996-01-01', 25, 'yaral@gmail.com', '0542879903');
                               insert into ticket values ('c117', '1110384712', 'Q633', CURRENT_TIMESTAMP, 'Bussines',1300,195);

☑ My Tutorials

                          57
                          58 insert into PASSENGER values ('7690611123', 'AMAL', 'YASSER', 'ALHARBI', 'Riyadh', 'Riyadh'
, 'Alsafa',77543, 'female', 'saudi', DATE '1979-02-08', 42, 'opy54@gmail.com', '0654328873');
                          60
                                /*Jeddah airport */
                          62
                          1 row(s) inserted.
                          1 row(s) inserted.
                          1 row(s) inserted.
                          1 row(s) inserted.
                          1 row(s) inserted.
```



The inserting

```
B Save
                          SQL Worksheet
                                                                                                          Actions ~
SQL Worksheet
                          84 insert into PASSENGER values ('1897535678', 'Abdullah', 'Muhammed', 'Alghamdi', 'Jeddah', 'Makkah'
                             ,'Asafa',53395, 'male', 'saudi', DATE '1970-03-09', 51, 'abdullah333@gmail.com','0505771700' );
My Session
                              /*Jeddah -- Egypt */
                             insert into airplane values ('Q444', '90SU');
Schema |
                              insert into airport_airplane values ('A555', 'Q444');
                              insert into flight values('G608', 'Q444', '11-04-2022', '10:00 PM', '12-04-2022', '12:00 AM', 'JEDDAH', 'EG
                          91
Quick SQL
                          92
                              /*passenger ticket */
                          93
                          94 insert into PASSENGER values ('2365890123', 'Heba', 'Hussam', 'Rahhal', 'Jeddah', 'Makkah'
My Scripts
                              ,'Alzahra',99883, 'female', 'Egyptian', DATE '1990-02-7', 31, 'heba@gmail.com','0550055050');
                              insert into ticket values ('g001', '2365890123', 'G608', CURRENT_TIMESTAMP, 'Economy', 2000,300);
My Tutorials
                          97
                          98 insert into PASSENGER values ('2435981563', 'Huda', 'Ahmed', 'Helmi', 'Jeddah', 'Makkah',
                              'Alsamer',58897, 'fmale', 'Egyptian', DATE'1980-05-19', 41, 'HEELMII@gmail.com', '0510594876' );
品 Code Library
                             insert into ticket values ('g002', '2435981563', 'G608', CURRENT_TIMESTAMP, 'Economy', 2000,300);
                         102 insert into PASSENGER values ('1110203040', 'Taif', 'saleh', 'Fadel', 'Jeddah', 'Makkah'
                              .'Obhur'. 38620. 'female'. 'saudi'. DATE '1999-11-08'. 22. 'tee@omail.com'. '0546572212'):
                         1 row(s) inserted.
                         1 row(s) inserted.
                         1 row(s) inserted.
                         1 row(s) inserted.
                         1 row(s) inserted.
```

```
SQL Worksheet
                                                                                                                     B Save
SQL Worksheet
                           insert into ticket values ('g003',
                      105
                      105 , insert into PASSENGER values ('110343140', 'Amjad', 'Mohammed', 'Alyamani', 'Jeddah', 'Makkah'
My Session
                            ,'Alnahda',70432, 'fmale', 'saudi', DATE'2000-02-14', 21, 'amjaly@gmail.com', '0564957221' );
                       108
                       109 /*Jeddah -- Yamen */
Schema
                       110
                       111 insert into airplane values ('Y222', 'YT80');
Quick SQL
                      112 insert into airport_airplane values ('A555', 'Y222');
                       insert into flight values('U09G', 'Y222', '11-04-2022', '10:00 PM', '12-04-2022', '11:00 AM', 'JEDDAH', 'Ye
                       114
My Scripts
                       115 /*passenger ticket */
                      116
                       117 insert into PASSENGER values ('2334876190', 'Ali', 'Haleem', 'Hajeb', 'Jeddah', 'Makkah'
My Tutorials
                       118 , 'Albalad', 73094, 'male', 'yemen', DATE'1989-02-7', 32, 'Aliii@gmail.com', '0630562197');
                       119 insert into ticket values ('t001', '2334876190', 'U096', CURRENT_TIMESTAMP, 'Economy', 1200,180);
                      120
Code Library
                       121 insert into PASSENGER values ('2873018453', 'Qassim', 'Haleem', 'Hajeb', 'Jeddah', 'Makkah'
                       122 ,'Albalad', 73094, 'male' ,'yemen', DATE'1992-05-19', 30, 'Qass@gmail.com', '0598267451' );
                       123 insert into ticket values ('t002', '2873018453', 'U096', CURRENT_TIMESTAMP, 'Economy', 1200,180);
                       1 row(s) inserted.
                       1 row(s) inserted.
                       1 row(s) inserted.
                       1 row(s) inserted.
                       1 row(s) inserted.
```

The tables after data population:

Passenger Table

		1 400011901	
4 1	SELECT * FROM PASSENGER		

												-	
DASSENGER_ID	F_NAME	H_NAVE	L_MARE	CITY	STATE	STREET_ADDRESS	POSTAL_CODE	GENDER	NATIONALITY	DATE_OF_BIRTH	AGE	BAIL	PHONE_NUM
1122334455	Shadin	Armed	Alharbi	Riyadh	Riyadh	Alnede	58733	female	seudi	12-807-95	26	shadir548gmail.com	0549919109
2231334455	reenan	Hamid	ichecla	Riyadh	aiyadh	Al Risel	56738	female	saudī	81-001-81	28	Reemarhh@gmall.com	9549322579
9311224455	nhalld	youseF	Albeladi	Miyadh	miyadh	Almada	50733	wale	saudi	15-050-58	38	khalid_hh@gmail.com	4545755004
4411223355	Juntanah	Harrad	alghanci	Riyadh	Riyadh	Almeda	56733	female	saudi	97-M4Y-82	3.0	jh_77@gwail.com	0555756879
1538296538	Hela	Anned	Alsairafi	Riyadh	Riyedh	Alrebset	17744	female	saudi	31-34N-77	44	halaty6@pmail.com	0543279980
1879644721	Jane	Arned	Almoteiri	Rìyadh	Riyedh	Alegramh	56733	femmle	saúdí	22-APR-99	22	jare549gmeil.com	6543217768
1110384712	vara	kralid	Alamani	Riyadh	aiyadh	Almanar	87991	female	saud1	91-JAN-96	29	yaral@gmall.com	9542079903
7698611123	AVAL	YASSER	ALHARBI	Riyadh	Rayadh	Alsafa	77543	female	saudi	88+FEB-75	42	opy54@gmmil.com	0654328873
1129038156	Tala	Abdullah	Alghandi	Jeddah	Makkah	Alsaner	58897	femble	saudī	21-FEB-01	20	tels119gmeil.com	9535564972
1322238188	Saraa	Abdullah	Alghandi	Jeddah	Makkats	Alsaner	58897	ssle	saudi	17-SEP-85	16	berses@gmail.com	0548893322
1199887766	Ebitesan	nuhamed	Alghandi	Deddahi	маккаю	Asafa	53395	female	skudi	14-MAY-98	er	basma7@gmall.com	9583818834
1857535678	Abdullah	nuharred	alghandi	beddah	Makkain	Asafa	33395	sale	saudī	85+6A5-78	11	sbdullansss§gmail.com	eses771700
7365890123	Hebs	Husson	Ranhal	Jeddah	Makkan	Alzatra	99883	female	Egyptian	87-FEB-98	31	heba@gweil.com	855885S858
2435981563	Hude	Anned	Helmi	Jeddah	Makkah	Alsener	58897	fmele	Egyptian	19-MAY-58	άΙ	HEELHII@gmmil.com	0510594076
1118283646	Teif	salen	Fadel	Seddeh	Makkah	Obhur	38626	ferole	saudi	RS-NOV-38	22	teofgrail.com	4546572212
118943146	Andad	ronamed	Alyamani	Deddahi.	маккаю	Almatida	78432	fiels	saud1	14-FEB-08	23	amjaly@gmail.com	0584957223
2334676198	Ali	Haleen	најев	Jedosh	Makkan	Albelad	79854	sale	yesen	97-FEB-83	32	Alliagenil.com	0638562197
2873010453	Qassim	Haleen	најев	Jeddah	Makkah	Albeled	73894	sale	yesen	19-697-92	38	Qess@gweil.com	0598267451

Ticket Table

TICKET_NUM	PASSENGER_ID	FLIGHT_ID	BOOKING_DATE	TICKET_TYPE	PRICE	ТД
t112	1122334455	F111	11-MAY-24 07.11.34.553698 AM	Bussines	1000	15
t113	2211334455	F111	11-MAY-24 07.11.34.561734 AM	Bussines	1000	15
t114	3311224455	F111	11-MAY-24 07.11.34.567745 AM	Economy	808	12
c115	1538296538	Q633	11-MAY-24 07.11.34.589233 AM	Economy	908	13
c116	1876644721	Q633	11-MAY-24 07.11.34.595242 AM	Bussines	1200	18
c117	1110384712	Q633	11-MAY-24 07.11.34.600836 AM	Bussines	1300	19
t212	1120838196	F222	11-MAY-24 07.11.34.623336 AM	Bussines	2000	36
t213	1322838188	F222	11-MAY-24 07.11.34.628899 AM	Bussines	2000	36
t214	1199887766	F222	11-MAY-24 07.11.34.634790 AM	Economy	1800	27
g001	2365890123	G608	11-MAY-24 07.11.34.651759 AM	Economy	2000	36
g002	2435981563	G608	11-MAY-24 07.11.34.658136 AM	Economy	2000	36
g003	1110203040	G608	11-MAY-24 07.11.34.663958 AM	Bussines	4888	66
tee1	2334876190	U09G	11-MAY-24 07.11.34.683576 AM	Economy	1200	18
t002	2873018453	U09G	11-MAY-24 07.11.34.689346 AM	Economy	1200	18

The tables after data population:

Flight Table

30	SELECT * FROM AIRPORT	
576		

AIRPORT_CODE	AIRPORT_NAME	CITY	STATE	STREET_ADDRESS	POSTAL_CODE
A222	makkah airport	makkah	makkah	Airport road	56700
A333	Taif airport	Taif	makkah	Airport road	56701
A444	prince nayef	Buraydah	Qassim	Airport road	56756
A111	king khalid	Riyadh	Riyadh	Airport road	56733
A555	king abdualaziz	3eddah	Makkah	Almadina road	24986

Download CSV

5 rows selected.

Airplane Table

1 SELECT * FROM AIRPLANE

AIRPLANE_ID	MODEL_NUM
P665	30ZX
F990	37EW
P999	60ZX
Q444	90SU
Y222	YTSO

Download CSV

5 rows selected.

Airport_Airplane Table

1 SELECT * FROM AIRPORT_AIRPL

AIRPORT_CODE	AIRPLANE_ID
A111	F990
A111	P666
A555	P999
A555	Q444
ASSS	Y222

Download CSV

The tables after data population:

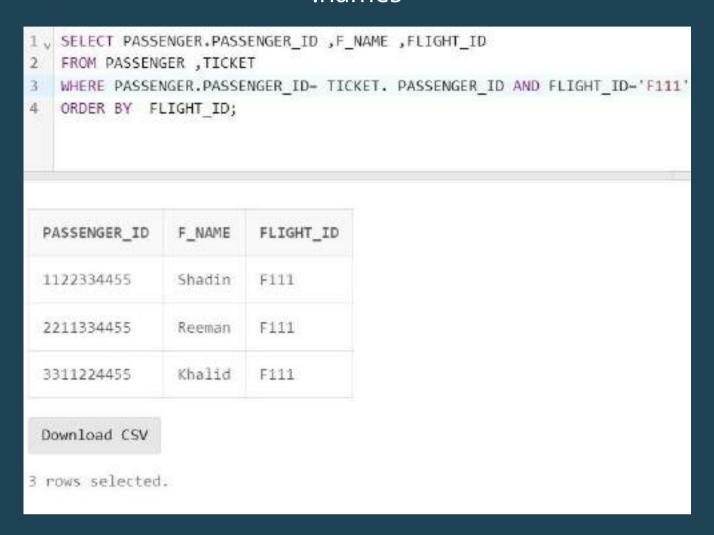
Airport Table

1 SELECT * FROM FLIGHT

FLIGHT_ID	AIRPLANE_ID	DEPARUREDATE	DEPARURETIME	ARRIVALDATE	ARRIVALTIME	FROM_	TO_
F111	P666	17-12-2021	86:88 PM	17-12-2021	07;50 PM	RIYADH	Dubai
Q633	F990	21-12-2021	01:10 PM	21-12-2021	02:55 PM	RIYADH	KUWAIT
F222	P999	21-2-2022	10:00 PM	22-2-2022	4:00 AM	3EDDAH	Paris
G608	Q444	11-04-2022	10:00 PM	12-04-2022	12:00 AM	3EDDAH	EGYPT
UØ9G	Y222	11-04-2022	10:80 PM	12-04-2022	11:00 AM	JEDDAH.	Yemen

Download CSV

This query return all passengers in specific flight (F111) with their .names





This query return all passengers that will the plane takes them off from Jeddah's airport (king . Abdulaziz Airport)

		16,6000	
2 FROM PASSENG	ER LEFT OUT .PASSENGER_	ER JOIN TICKE ID=TICKET.PAS	
DASSENGED TO	F_NAME	TICKET_NUM	
PASSENGER_ID 1897535678	Abdullah	- TICKET_NOM	
7690611123	AMAL	120	
110343140	Amjad	20	
4411223355	Jumanah	550	
Download CSV			
1 rows selected			

This query return all passengers that don't have any tickets .

1 v SELECT TICKET.PASSENGER_ID, TICKET.PRICE, TICKET.TICKET_TYP

2 FROM TICKET

3

WHERE TICKET.PRICE BETWEEN 1200 AND 1800;

PASSENGER_ID	PRICE	TICKET_TYPE
1876644721	1200	Bussines
1110384712	1300	Bussines
1199887766	1800	Economy
2334876190	1200	Economy
2873018453	1200	Economy

Download CSV

```
1 SELECT FLIGHT_ID, COUNT(*)
2 FROM TICKET
3 GROUP BY FLIGHT_ID
4 ORDER BY FLIGHT_ID;
```

FLIGHT_ID	COUNT(*)
F111	3
F222	3
G608	3
Q633	3
U09G	2

Download CSV

1 SELECT MIN(PRICE) AS MIN_PRICE,

2 MAX(PRICE) AS MAX_PRICE,

3 AVG(PRICE) AS AVG_PRICE

4 FROM TICKET

MIN_PRICE	MAX_PRICE	AVG_PRICE
800	4000	1600

Download CSV

Procedure

Procedure created.

```
SELECT* FROM FLIGHT;
EXECUTE time_update ('F111', '12:00PM', '02:AM');
```

FLIGHT_ID	AIRPLANE_ID	DEPARUREDATE	DEPARURETIME	ARRIVALDATE	ARRIVALTIME	FROM_	то_
F111	P666	17-12-2021	06:00 PM	17-12-2021	07:50 PM	RIYADH	Dubai
Q633	F990	21-12-2021	01:10 PM	21-12-2021	02:55 PM	RIYADH	KUWAIT
F222	P999	21-2-2022	10:00 PM	22-2-2022	4:00 AM	JEDDAH	Paris
G608	Q444	11-04-2022	10:00 PM	12-04-2022	12:00 AM	JEDDAH	EGYPT
U09G	Y222	11-04-2022	10:00 PM	12-04-2022	11:00 AM	JEDDAH	Yemen

Download CSV

5 rows selected.

Statement processed. Departure time of flight F111 has changed . our apologies Expected new time is 12:00PM

Procedure

```
AS CURSON ticket_IS

SELECT passenger.passenger_id, passenger.f_name, passenger.l_name, ticket.ticket_num, ticket.ticket_type, ticket.flight_id ,flight.from_,flight.to_ FROM passenger , ticket, flight
WHERE passenger.passenger_id-ticket.passenger_id

AND TICKET.flight_id *FLIGHT.flight_id AND passenger.depassenger.passenger_id;

BEGIN

FOR information IN ticket_LDOP

DEMS_OUTPUT.PUT_LINE('Full NAME : '|| information.f_mame||' '||information.l_name);

DEMS_OUTPUT.PUT_LINE('ID : '||information.passenger_id);

DEMS_OUTPUT.PUT_LINE('IICKET type: '||information.ticket_num);

DEMS_OUTPUT.PUT_LINE('IICKET Type: '||information.ticket_type);

DEMS_OUTPUT.PUT_LINE('IICKET Type: '||information.flight_id);

DEMS_OUTPUT.PUT_LINE('IICKET Type: '||information.from_||' '|| 'TO : '|| information.to_);

END Ticket_information;
```

Procedure crested.

1 EXEC Ticket_information('1122334455');

Statement processed.

Full NAME : Shadin Alharbi

ID: 1122334455

Ticket number: t112

Ticket Tybe: Bussines

FLIGHT ID: F111

FROM: RIYADH TO: Dubai



Thanks