Train Station Database Management

CCCS 215

Project Report

Student name	ID
Ruba Alsulami	2110618
Arjwan Alharbi	2110826
Taif Saleh	2111370
Raghad Alamri	2110102

By Dr. Dalal Bakheet

-Problem Description

Due to the loss of passenger data and the lack of organization of trips, recording data in files was tiring for employees and disrupted the workflow. Also, the train station must be more efficient to serve passengers because of the increasing number of travellers, and trains run at an unspecified time and destination, so we decided to convert it into a more efficient system and save data by using a database that includes all the data for the station. Where all data appears in a coordinated and easily accessible form by the work team from anywhere and as quickly as possible. It is also keen to preserve the rights of both passengers and employees by writing all the necessary information and keeping it confidential and secure.
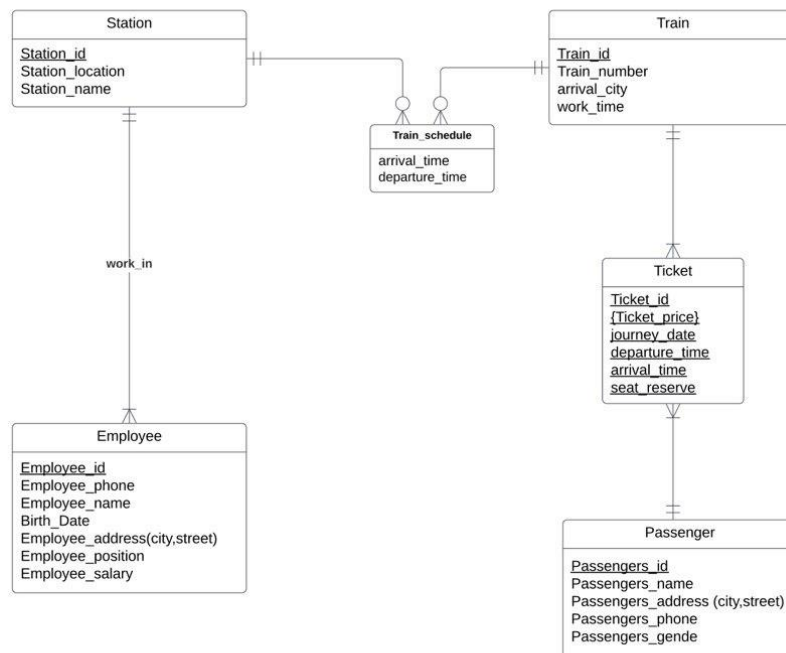
-Tables & Entity's

List of entities

Passengers
Train
Ticket
Station
Employee

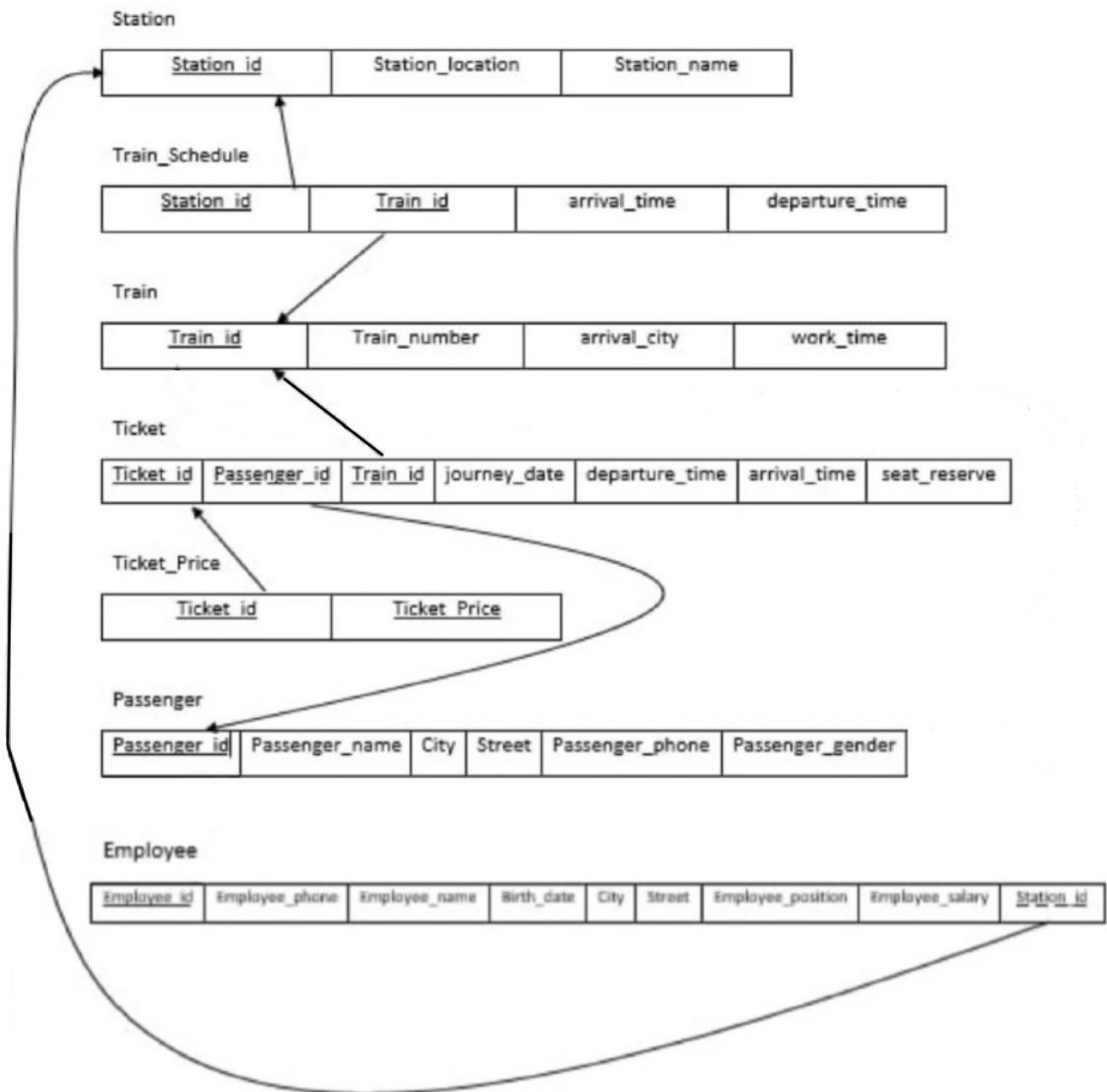| Entity	Attribute
Passengers	-id -name -address -phone -gender
Train	-id -arrival city -work time
Ticket	-id -passenger id -train id -price -journey date -departure time -arrival time -seat reserved
Station	-id -location -name
Employee	-id -phone -name -date of birth -position -salary

-ER model

-Business Rules

1. Each passenger must have more than one ticket which contain (price,journey date,departure time,arrival time,seat reserve).
2. Each employee must be works in one station only.
3. Each station has more than one employee.
4. There must be more than one train in each station.
5. Each train must have one passenger or more.
6. Each train must have more than one ticket for passenger.
7. Each ticket must be for one train only.
8. Each ticket must be for one passenger only.
9. Each train must be containing more than one passenger.

-Relational schema

Station

Station_id	Station_location	Station_name

Train_Schedule

Station_id	Train_id	arrival_time	departure_time

Train

Train_id	Train_number	arrival_city	work_time

Ticket

Ticket_id	Passenger_id	Train_id	journey_date	departure_time	arrival_time	seat_reserve

Ticket_Price

Ticket_id	Ticket_Price

Passenger

Passenger_id	Passenger_name	City	Street	Passenger_phone	Passenger_gender

Employee

Employee_id	Employee_phone	Employee_name	Birth_date	City	Street	Employee_position	Employee_salary	Station_id

5

Functional Dependencies

Station_id	Station_location , Station_name
Train_id	Train_number , arrival_city ,work_time
Employee_id	Employee_phone ,Employee_name , Birth_Date , city,street , Employee_position , Employee_salary
Passengers_id	Passengers_name ,city,street,Passengers_phone ,Passengers_gende
Ticket_id	passenger_id ,train_id ,Ticket_price,journey_date ,departure_time ,arrival_time seat_reserve

-Normalization

The condition for 1NF:

1. -All relation must have unique primary key.
2. -Remove repeating group or remove multi value attribute.
3. -remove composite attribute.

Schema already satisfied to the 1Nf rules, all attribute atomic.

The condition for 2NF:

1. -Remove partial functional dependencies.

Relation Train_schedule have full dependency on composite PK.

all other relation have one PK ; already in 2NF .

 Schema already satisfied to the 2Nf rules

 The condition for 3NF:

1. -Remove transitive dependencies.

The schema already in 3NF; No transitive dependency.

Table name	Attribute	datatype	Constraints
Passenger	Passenger_id	number	Unique (PK)
	Passenger_name	Varchar2	
	Passenger_phone	number	
	Passenger_gender	Varchar2	
Passenger_address	Passenger_id	number	composite PK, FK
	city	Varchar2	
	street	Varchar2	
Train	Train_id	number	Unique (PK)
	Train_number	number	
	arrival_city	Varcha2	
	work_time	Varchar2	
Ticket	Ticket_id	Number	Unique (PK)
	Passenger_id	Number	not null (FK)
	train_id	Number	not null (FK)
	journey_date	Date	
	departure_time	Varchar2	
	arrival_time	Varchar2	
	seat_reserve	Varchar2	
Ticket_price	Ticket_id	Varchar2	composite PK, FK
	Ticket_price	Varchar2	
Station	Station_id	Number	Unique (PK)
	Station_location	Varchar2	
	Station_name	Varchar2	
Train_schedule	Station_id	Number	composite PK, FK
	train_id	Number	composite PK, FK
	arrival_time	Varchar2	
	departure_time	Varchar2	
Employee	Employee_id	Number	Unique (PK)
	Station_id	Number	not null (FK)
	Employee_phone	Number	
	Employee_name	Varchar2	
	Birth_Date	Date	
	Employee_position	Varchar2	
	Employee_salary	Number	
	Employee_id	Number	composite PK, FK

Employee_address	City	Varchar2	
	street	Varchar2	

-SQL Code:

-Create Table

```sql
1   create table Passenger(
2   Passenger_id number(20) primary key,
3   Passenger_name varchar2(30),
4   Passenger_phone number(30),
5   Passenger_gender varchar2 (20)
6   );
7
8   create table Passenger_address(
9   Passenger_id number(20) primary key,
10  city varchar2(20),
11  street varchar2(20)
12  );
```

```sql
13  create table Train(
14  Train_id number(20)primary key,
15  Train_number number(20),
16  arrival_city varchar2(30),
17  work_time varchar2(30)
18  );
19  create table Ticket(
20  Ticket_id number(20) primary key,
21  Train_id number(20) not null,
22  Passenger_id number(20) not null,
23  journey_date date,
24  departure_time varchar2(30),
25  arrival_time varchar2(30),
26  seat_reserve varchar2(20)
27  );
```

```sql
28  );
29  create table Ticket_price(
30  Ticket_id number(20) primary key,
31  Price number(30)
32  );
33  create table Station(
34  Station_id number(20) primary key,
35  Station_name varchar2(30),
36  Station_location varchar2(30)
37  );
38  create table Train_schedule(
39  Station_id number(20) ,
40  Train_id number(20) ,
41  arrival_time varchar2(30),
42  departure_time varchar2(30),
43  CONSTRAINT Train_sch_pk primary key (Station_id,Train_id)
44  );
```

```sql
45
46  create table Employee(
47  Employee_id number(20) primary key,
48  Station_id number(20)not null,
49  Employee_phone number(30),
50  Employee_name varchar2(30),
51  Birth_Date date,
52  Employee_position varchar2(35),
53  Employee_salary number (30)
54  );
55
56  create table Employee_address(
57  Employee_id number(20) primary key,
58  city varchar2(20),
59  street varchar2(20)
60  );
61
```

9

```
Table created.

Table created.

Table created.

Table created.

Table created.

Table created.

Table created.

Table created.

Table created.
```

Add Foreign key/

```
61
62
63  ---------------------------------------------------------------------
64  alter table Train_schedule add Foreign key (Station_id) References Station(Station_id);
65  alter table Train_schedule add Foreign key (Train_id) References Train(Train_id);
66
67  alter table Ticket add Foreign key (Train_id) References Train(Train_id);
68  alter table Ticket add Foreign key (Passenger_id) References Passenger(Passenger_id);
69
70  alter table Ticket_price add Foreign key (Ticket_id) References Ticket(Ticket_id);
71
72  alter table Passenger_address add Foreign key (Passenger_id) References Passenger(Passenger_id);
73
74  alter table Employee add Foreign key (Station_id) References Station(Station_id);
75  alter table Employee_address add Foreign  key (Employee_id) References Employee(Employee_id);
76
77  ---------------------------------------------------------------------
```

```
Table altered.

Table altered.

Table altered.

Table altered.

Table altered.

Table altered.

Table altered.

Table altered.
```

11

Add to each table 8 rows/

```
80   insert into Train values(110,20,'Almedina','8:00');
81   insert into Train values(111,1,'Jeddah','8:00');
82   insert into Train values(112,7,'Makkah','8:00');
83   insert into Train values(113,12,'Riyadh','8:30');
84   insert into Train values(114,2,'Almedina','8:35');
85   insert into Train values(115,11,'Riyadh','8:40');
86   insert into Train values(116,3,'Makkah','9:00');
87   insert into Train values(117,8,'Khabar','9:30');
88
89   insert into Passenger values(2110618,'Khalid Ahmad',0566696265,'Male');
90   insert into Passenger values(1987600,'Mohammed Ali',0578944200,'Male');
91   insert into Passenger values(1344288,'Ruba Khalid',0544300199,'Female');
92   insert into Passenger values(2119080,'Arjwan Alharbi',0559080700,'Female');
93   insert into Passenger values(1877632,'Taif Saleh',0588651100,'Female');
94   insert into Passenger values(2990540,'Raghad alamri',0511908399,'Female');
95   insert into Passenger values(2223400,'Omar Omran',0567898331,'Male');
96   insert into Passenger values(2113040,'Fahad Mansor',0549408832,'Male');
```

```
98    insert into Passenger_address values(2110618,'Jeddah', 'Hira ');
99    insert into Passenger_address values(1987600,'Jeddah', 'Quraish ' );
100   insert into Passenger_address values(1344288,'Riyadh', 'Tahlia ');
101   insert into Passenger_address values(2119080,'Riyadh', 'Tahlia ');
102   insert into Passenger_address values(1877632,'Makkah ', 'Ajyad ');
103   insert into Passenger_address values(2990540,'Khabar ', 'king Abdul Aziz');
104   insert into Passenger_address values(2223400,'Almedina' , 'Ajyad');
105   insert into Passenger_address values(2113040,'Almedina' , 'Prince Majed ');
106
107   insert into TICKET values(1003824461,110,2110618,to_date('05-03-2023', 'mm/dd/yyyy'),'10:00','1:00','A01');
108   insert into TICKET values(1013641165,111,1987600,to_date('05-01-2023', 'mm/dd/yyyy'),'10:00','1:00','A02');
109   insert into TICKET values(1023472051,112,1344288,to_date('10-03-2023', 'mm/dd/yyyy'),'1:00','3:00','B10');
110   insert into TICKET values(1032586972,113,2113040,to_date('08-08-2023', 'mm/dd/yyyy'),'13:20','15:20','B17');
111   insert into TICKET values(1049283664,114,2223400,to_date('04-02-2023', 'mm/dd/yyyy'),'18:35','21:35','A21');
112   insert into TICKET values(1058152379,115,1877632,to_date('04-20-2023', 'mm/dd/yyyy'),'4:00','6:20','C01');
113   insert into TICKET values(1061568293,116,2990540,to_date('11-17-2023', 'mm/dd/yyyy'),'7:40','10:00','C03');
114   insert into TICKET values(1075250413,117,2119080,to_date('12-10-2023', 'mm/dd/yyyy'),'20:15','22:50','D09');
```

```
116   insert into TICKET_PRICE values(1003824461,100);
117   insert into TICKET_PRICE values(1013641165,100);
118   insert into TICKET_PRICE values(1023472051,80);
119   insert into TICKET_PRICE values(1032586972,100);
120   insert into TICKET_PRICE values(1049283664,80);
121   insert into TICKET_PRICE values(1058152379,110);
122   insert into TICKET_PRICE values(1061568293,90);
123   insert into TICKET_PRICE values(1075250413,200);
124
125   insert into Station values(11,'Riyadh train','Aldammam');
126   insert into Station values(22,'Riyadh train','Alkhobar');
127   insert into Station values(33,'Riyadh train','Riyadh');
128   insert into Station values(44,'Alharameen train','Almedina');
129   insert into Station values(55,'Alharameen train','Makkah');
130   insert into Station values(66,'Alharameen train','Jeddah');
131   insert into Station values(77,'SAR train','Alqaseem');
132   insert into Station values(88,'SAR train','Hail');
```

```
134   insert into Train_schedule values(11,110,'10:00','1:00');
135   insert into Train_schedule values(22,111,'10:00','1:00');
136   insert into Train_schedule values(33,112,'1:00','3:00');
137   insert into Train_schedule values(44,113,'13:20','15:20');
138   insert into Train_schedule values(55,114,'18:35','21:35');
139   insert into Train_schedule values(66,115,'4:00','6:20');
140   insert into Train_schedule values(77,116,'7:40','10:00');
141   insert into Train_schedule values(88,116,'20:15','22:50');
142
143   insert into Employee values(11101,11,0505250413,'Saleh Ali',to_date('2-1-1990', 'mm/dd/yyyy'),'Information office employee',8000);
144   insert into Employee values(11102,22,0509871325,'Ali Ahmad',to_date('9-14-1997', 'mm/dd/yyyy'),'Reservation office employee',9000);
145   insert into Employee values(11103,33,0507725431,'Sami Omar',to_date('10-5-1997', 'mm/dd/yyyy'),'Lost and Found office',5000);
146   insert into Employee values(11104,44,0501234151,'Khaled Mohammed',to_date('1-10-2000', 'mm/dd/yyyy'),'Special needs service',10000);
147   insert into Employee values(11105,55,0505619980,'Waleed Ahmad',to_date('3-20-1995', 'mm/dd/yyyy'),'E-ticket vending machines employee',5500);
148   insert into Employee values(11106,66,0505511289,'Salem Saleh',to_date('11-2-1999', 'mm/dd/yyyy'),'Reservation officer',4500);
149   insert into Employee values(11107,77,0509876532,'Mohammed Hani',to_date('12-3-2000', 'mm/dd/yyyy'),'Lost and Found office employee',6000);
150   insert into Employee values(11108,88,0504511278,'Yousef Waleed',to_date('11-25-1998', 'mm/dd/yyyy'),'Car parking service',2000);
```

```
152   insert into Employee_address values(11101,'Aldammam','king fahd ');
153   insert into Employee_address values(11102,'Makkah','al-husainiah ');
154   insert into Employee_address values(11103,'Jeddah','al-madinah ');
155   insert into Employee_address values(11104,'Hail','king abdullah ');
156   insert into Employee_address values(11105,'Alkhobar','king khalid');
157   insert into Employee_address values(11106,'Alqaseem','sari ');
158   insert into Employee_address values(11107,'Riyadh','king abdullah ');
159   insert into Employee_address values(11108,'Almedina','4th ring ');
160
```

```
1 row(s) inserted.

1 row(s) inserted.

1 row(s) inserted.

1 row(s) inserted.

1 row(s) inserted.

1 row(s) inserted.

1 row(s) inserted.

1 row(s) inserted.

1 row(s) inserted.

1 row(s) inserted.

1 row(s) inserted.

1 row(s) inserted.

1 row(s) inserted.

1 row(s) inserted.
```

Tables after add rows

PASSENGER_ID	PASSENGER_NAME	PASSENGER_PHONE	PASSENGER_GENDER
2110618	Khalid Ahmad	566696265	Male
1987600	Mohammed Ali	578944200	Male
1344288	Ruba Khalid	544300199	Female
2119080	Arjwan Alharbi	559080700	Female
1877632	Taif Saleh	588651100	Female
2990540	Raghad alamri	511908399	Female
2223400	Omar Omran	567898331	Male
2113040	Fahad Mansor	549408832	Male

PASSENGER_ID	CITY	STREET
2110618	Jeddah	Hira
1987600	Jeddah	Quraish
1344288	Riyadh	Tahlia
2119080	Riyadh	Tahlia
1877632	Makkah	Ajyad
2990540	Khabar	king Abdul Aziz
2223400	Almedina	Ajyad
2113040	Almedina	Prince Majed

TRAIN_ID	TRAIN_NUMBER	ARRIVAL_CITY	WORK_TIME
110	20	Almedina	8:00
111	1	Jeddah	8:00
112	7	Makkah	8:00
113	12	Riyadh	8:30
114	2	Almedina	8:35
115	11	Riyadh	8:40
116	3	Makkah	9:00
117	8	Khabar	9:30

TICKET_ID	TRAIN_ID	PASSENGER_ID	JOURNEY_DATE	DEPARTURE_TIME	ARRIVAL_TIME	SEAT_RESERVE
1003824461	110	2110618	03-MAY-23	10:00	1:00	A01
1013641165	111	1987600	01-MAY-23	10:00	1:00	A02
1023472051	112	1344288	03-OCT-23	1:00	3:00	B10
1032586972	113	2113040	08-AUG-23	13:20	15:20	B17
1049283664	114	2223400	02-APR-23	18:35	21:35	A21
1058152379	115	1877632	20-APR-23	4:00	6:20	C01
1061568293	116	2990540	17-NOV-23	7:40	10:00	C03
1075250413	117	2119080	10-DEC-23	20:15	22:50	D09

14

TICKET_ID	PRICE
1003824461	100
1013641165	100
1023472051	80
1032586972	100
1049283664	80
1058152379	110
1061568293	90
1075250413	200

STATION_ID	STATION_NAME	STATION_LOCATION
11	Riyadh train	Aldammam
22	Riyadh train	Alkhobar
33	Riyadh train	Riyadh
44	Alharameen train	Almedina
55	Alharameen train	Makkah
66	Alharameen train	Jeddah
77	SAR train	Alqaseem
88	SAR train	Hail

STATION_ID	TRAIN_ID	ARRIVAL_TIME	DEPARTURE_TIME
11	110	10:00	1:00
22	111	10:00	1:00
33	112	1:00	3:00
44	113	13:20	15:20
55	114	18:35	21:35
66	115	4:00	6:20
77	116	7:40	10:00
88	116	20:15	22:50

EMPLOYEE_ID	STATION_ID	EMPLOYEE_PHONE	EMPLOYEE_NAME	BIRTH_DATE	EMPLOYEE_POSITION	EMPLOYEE_SALARY
11101	11	505250413	Saleh Ali	01-FEB-90	Information office employee	8000
11102	22	509871325	Ali Ahmad	14-SEP-97	Reservation office employee	9000
11103	33	507725431	Sami Omar	05-OCT-97	Lost and Found office	5000
11104	44	501234151	Khaled Mohammed	10-JAN-00	Special needs service	10000
11105	55	505619980	Waleed Ahmad	20-MAR-95	E-ticket vending machines employee	5500
11106	66	505511289	Salem Saleh	02-NOV-99	Reservation officer	4500
11107	77	509876532	Mohammed Hani	03-DEC-00	Lost and Found office employee	6000
11108	88	504511278	Yousef Waleed	25-NOV-98	Car parking service	2000

EMPLOYEE_ID	CITY	STREET
11101	Aldammam	king fahd
11102	Makkah	al-husainiah
11103	Jeddah	al-madinah
11104	Hail	king abdullah
11105	Alkhobar	king khalid
11106	Alqaseem	sari
11107	Riyadh	king abdullah
11108	Almedina	4th ring

Query/

```
168    --where
169 v  select Employee_name as Name, Employee_salary as Salary, Employee_position as Position
170    from Employee
171    where Employee_salary between 1000 and 5000;
172
```

NAME	SALARY	POSITION
Sami Omar	5000	Lost and Found office
Salem Saleh	4500	Reservation officer
Yousef Waleed	2000	Car parking service

Download CSV

3 rows selected.

```
173 v  select departure_time as DepartureTime, arrival_time as ArrivalTime
174    from Ticket
175    where departure_time in ('10:00') or arrival_time in ('6:30');
176
```

DEPARTURETIME	ARRIVALTIME
10:00	1:00
10:00	1:00

Download CSV

2 rows selected.

```
178  --aggregate
179  select min(Price) as LowestPrice,
180  max(Price) as HighestPrice,
181  sum(Price) as SumPrice,
182  avg(Price) as AVGPrice  |
183  from TICKET_PRICE
184
```

LOWESTPRICE	HIGHESTPRICE	SUMPRICE	AVGPRICE
80	200	860	107.5

Download CSV

```
185  select count(Passenger_gender) as Gender
186  from Passenger
187  where Passenger_gender = 'Female'
```

GENDER
4

Download CSV

```
189  select Ticket_id,count(seat_reserve) as Seat
190  from Ticket
191  where seat_reserve like 'A%' or seat_reserve like 'B%'
192  group by Ticket_id; |
193
```

TICKET_ID	SEAT
1023472051	1
1003824461	1
1032586972	1
1049283664	1
1013641165	1

Download CSV

5 rows selected.

17

```
89   --order by
90 v select Passenger_id, Passenger_name, Passenger_gender
91   from Passenger
92   order by Passenger_name;
```

PASSENGER_ID	PASSENGER_NAME	PASSENGER_GENDER
2119080	Arjwan Alharbi	Female
2113040	Fahad Mansor	Male
2110618	Khalid Ahmad	Male
1987600	Mohammed Ali	Male
2223400	Omar Omran	Male
2990540	Raghad alamri	Female
1344288	Ruba Khalid	Female
1877632	Taif Saleh	Female

Download CSV

```
194  --group by
195 v select count(Employee_id) as EmployeeID, Employee_salary as Salary
196  from Employee
197  group by Employee_salary
198  order by count(Employee_id);
199
200  --subquery
```

EMPLOYEEID	SALARY
1	8000
1	4500
1	9000
1	2000
1	6000
1	10000
1	5500
1	5000

Download CSV

18

```
200  --subquery
201  select Passenger_name as Name
202  from Passenger
203  where Passenger_id in (select distinct Passenger_id from Ticket);
```

NAME
Ruba Khalid
Taif Saleh
Mohammed Ali
Khalid Ahmad
Fahad Mansor
Arjwan Alharbi
Omar Omran
Raghad alamri

Download CSV

```
205  --join query
206  ---equi join
207  select Passenger.Passenger_id as PID, Passenger_name as Name, Ticket_id as TID
208  from Passenger, Ticket
209  where Passenger.Passenger_id = Ticket.Passenger_id
210  order by Ticket_id;
```

PID	NAME	TID
2110618	Khalid Ahmad	1003824461
1987600	Mohammed Ali	1013641165
1344288	Ruba Khalid	1023472051
2113040	Fahad Mansor	1032586972
2223400	Omar Omran	1049283664
1877632	Taif Saleh	1058152379
2990540	Raghad alamri	1061568293
2119080	Arjwan Alharbi	1075250413

Download CSV

```
212  ---outer join
213  ----full outer join
214  select Train.Train_number as TrainNumber, Ticket.journey_date as JourneyDate
215  from Train
216  full outer join Ticket on Train.Train_id = Ticket.Train_id
217  order by Train_number;
218
```

TRAINNUMBER	JOURNEYDATE
1	01-MAY-23
2	02-APR-23
3	17-NOV-23
7	03-OCT-23
8	10-DEC-23
11	20-APR-23
12	08-AUG-23
20	03-MAY-23

Download CSV

```
219  ----left outer join
220  select Passenger.Passenger_id as PassengerID, Ticket.seat_reserve as Seat
221  from Passenger
222  left outer join Ticket on Passenger.Passenger_id = Ticket.Passenger_id
223  order by Passenger.Passenger_id;
224
```

PASSENGERID	SEAT
1344288	B10
1877632	C01
1987600	A02
2110618	A01
2113040	B17
2119080	D09
2223400	A21
2990540	C03

Download CSV

20

```
225   ----right outer join
226 v select Station.Station_id as StationID, Station.Station_name as StationName, Employee.Employee_id
227   from Station
228   right outer join Employee on Station.Station_id = Employee.Station_id
229   order by Station.Station_id;
230
```

STATIONID	STATIONNAME	EMPLOYEE_ID
11	Riyadh train	11101
22	Riyadh train	11102
33	Riyadh train	11103
44	Alharameen train	11104
55	Alharameen train	11105
66	Alharameen train	11106
77	SAR train	11107
88	SAR train	11108

Download CSV

```
231  -----------------------------------------------------------------------
232  --stored procedures
233 v CREATE OR REPLACE PROCEDURE employee_queuer(p_emid employee.employee_id%TYPE)
234  AS
235      v_phone        employee.employee_phone%TYPE;
236      v_name         employee.employee_name%TYPE;
237      v_pos          employee.employee_position%TYPE;
238      v_salary       employee.employee_salary%TYPE;
239 v BEGIN
240      SELECT employee_phone,employee_name,employee_position,employee_salary
241          INTO v_phone,v_name,v_pos,v_salary
242          FROM employee WHERE employee_id=p_emid;
243      DBMS_OUTPUT.PUT_LINE('**OUR EMPLOYEE IN TRAIN STATION**');
244      DBMS_OUTPUT.PUT_LINE('Employee ID : ' || p_emid);
245      DBMS_OUTPUT.PUT_LINE('Employee Phone : ' || v_phone);
246      DBMS_OUTPUT.PUT_LINE('Employee Name : ' || v_name);
247      DBMS_OUTPUT.PUT_LINE('Employee Position : ' || v_pos);
248      DBMS_OUTPUT.PUT_LINE('Employee Salary : ' || v_salary);
249  END;
250  begin
```

```
Procedure created.
```

```
254 v begin
255   employee_queuer(11102);
256   end;
257
258
```

```
Statement processed.
**OUR EMPLOYEE IN TRAIN STATION**
Employee ID : 11102
Employee Phone : 509871325
Employee Name : Ali Ahmad
Employee Position : Reservation office employee
Employee Salary : 9000
```

```
250 v begin
251   employee_queuer(11106);
252   end;
253
```

```
Statement processed.
**OUR EMPLOYEE IN TRAIN STATION**
Employee ID : 11106
Employee Phone : 505511289
Employee Name : Salem Saleh
Employee Position : Reservation officer
Employee Salary : 4500
```

```
264 ∨ CREATE OR REPLACE PROCEDURE station_queuer(p_stid station.station_id%TYPE)
265   AS
266       v_name          station.station_name%TYPE;
267       v_location      station.station_location%TYPE;
268
269 ∨ BEGIN
270       SELECT station_name,station_location
271           INTO v_name,v_location
272           FROM station WHERE station_id=p_stid;
273       DBMS_OUTPUT.PUT_LINE('**OUR STATION IN TRAIN STATION**');
274       DBMS_OUTPUT.PUT_LINE('Station ID : ' || p_stid);
275       DBMS_OUTPUT.PUT_LINE('Station Name : ' || v_name);
276       DBMS_OUTPUT.PUT_LINE('Station Location : ' || v_location);
277   END;
278

Procedure created.
```

```
279 ∨ begin
280   station_queuer(11);
281   end;
282


Statement processed.
**OUR STATION IN TRAIN STATION**
Station ID : 11
Station Name : Riyadh train
Station Location : Aldammam
```

```
283 ∨ begin
284   station_queuer(55);
285   end;
286


Statement processed.
**OUR STATION IN TRAIN STATION**
Station ID : 55
Station Name : Alharameen train
Station Location : Makkah
```

23

```
282   --------------------------------------------------------------------------------
283   --update
284   --1
285 v CREATE OR REPLACE PROCEDURE update_position(p_employee in employee.employee_id%type,
286   p_empjob in employee.employee_position%type,p_empsal in employee.employee_salary%type)
287   AS
288   BEGIN
289       update employee set employee_position=p_empjob,
290       employee_salary=p_empsal
291       where employee_id=p_employee;
292   END update_position;
293
```

Procedure created.

```
294 v begin
295   update_position(11108,'Director of International Stations',11000);
296   end;
297
```

Statement processed.

Before Update:

EMPLOYEE_ID	STATION_ID	EMPLOYEE_PHONE	EMPLOYEE_NAME	BIRTH_DATE	EMPLOYEE_POSITION	EMPLOYEE_SALARY
11101	11	505250413	Saleh Ali	01-FEB-90	Information office employee	8000
11102	22	509871325	Ali Ahmad	14-SEP-97	Reservation office employee	9000
11103	33	507725431	Sami Omar	05-OCT-97	Lost and Found office	5000
11104	44	501234151	Khaled Mohammed	10-JAN-00	Special needs service	10000
11105	55	505619980	Waleed Ahmad	20-MAR-95	E-ticket vending machines employee	5500
11106	66	505511289	Salem Saleh	02-NOV-99	Reservation officer	4500
11107	77	509876532	Mohammed Hani	03-DEC-00	Lost and Found office employee	6000
11108	88	504511278	Yousef Waleed	25-NOV-98	Car parking service	2000

After Update:

EMPLOYEE_ID	STATION_ID	EMPLOYEE_PHONE	EMPLOYEE_NAME	BIRTH_DATE	EMPLOYEE_POSITION	EMPLOYEE_SALARY
11101	11	505250413	Saleh Ali	01-FEB-90	Information office employee	8000
11102	22	509871325	Ali Ahmad	14-SEP-97	Reservation office employee	9000
11103	33	507725431	Sami Omar	05-OCT-97	Lost and Found office	5000
11104	44	501234151	Khaled Mohammed	10-JAN-00	Special needs service	10000
11105	55	505619980	Waleed Ahmad	20-MAR-95	E-ticket vending machines employee	5500
11106	66	505511289	Salem Saleh	02-NOV-99	Reservation officer	4500
11107	77	509876532	Mohammed Hani	03-DEC-00	Lost and Found office employee	6000
11108	88	504511278	Yousef Waleed	25-NOV-98	Director of International Stations	11000

```
299   --2
300   CREATE OR REPLACE PROCEDURE update_phone(p_passenger in passenger.passenger_id%type,
301   p_passphone in passenger.passenger_phone%type)
302   AS
303   BEGIN
304      update passenger set passenger_phone=p_passphone
305      where passenger_id=p_passenger;
306   END update_phone;
307

Procedure created.
```

```
307
308   begin
309   update_phone(2110618,0566690607);
310   end;

Statement processed.
```

Before Update:

PASSENGER_ID	PASSENGER_NAME	PASSENGER_PHONE	PASSENGER_GENDER
2110618	Khalid Ahmad	566696265	Male
1987600	Mohammed Ali	578944200	Male
1344288	Ruba Khalid	544300199	Female
2119080	Arjwan Alharbi	559080700	Female
1877632	Taif Saleh	588651100	Female
2990540	Raghad alamri	511908399	Female
2223400	Omar Omran	567898331	Male
2113040	Fahad Mansor	549408832	Male

After Update:

PASSENGER_ID	PASSENGER_NAME	PASSENGER_PHONE	PASSENGER_GENDER
2110618	Khalid Ahmad	566690607	Male
1987600	Mohammed Ali	578944200	Male
1344288	Ruba Khalid	544300199	Female
2119080	Arjwan Alharbi	559080700	Female
1877632	Taif Saleh	588651100	Female
2990540	Raghad alamri	511908399	Female
2223400	Omar Omran	567898331	Male
2113040	Fahad Mansor	549408832	Male