Flight Database

Code –

create database airline\_flight\_database\_5;

use airline\_flight\_database\_5;

CREATE TABLE FLIGHTS(

FL\_ID INT,FROM\_PLACE VARCHAR(20),

TO\_PLACE VARCHAR(20),

DISTANCE INT,

DEPARTS TIME,

ARRIVES TIME,

PRICE INT,

PRIMARY KEY(FL\_ID));

CREATE TABLE AIRCRAFT(

A\_ID INT,

A\_NAME VARCHAR(10),

CRUISING\_RANGE INT,

PRIMARY KEY(A\_ID));

CREATE TABLE EMPLOYEE(

E\_ID INT,

E\_NAME VARCHAR(10),

SALARY INT,

PRIMARY KEY(E\_ID));

CREATE TABLE CERTIFIED(

E\_ID INT,

A\_ID INT,

FOREIGN KEY(E\_ID) REFERENCES EMPLOYEE(E\_ID),

FOREIGN KEY(A\_ID) REFERENCES AIRCRAFT(A\_ID));

INSERT INTO FLIGHTS VALUES(111,'BENGALURU','FRANKFURT',1000,'09:30','16:00',10000);

INSERT INTO FLIGHTS VALUES(222,'MANDISON','BENGALURU',1020,'01:30','7:00',9000);

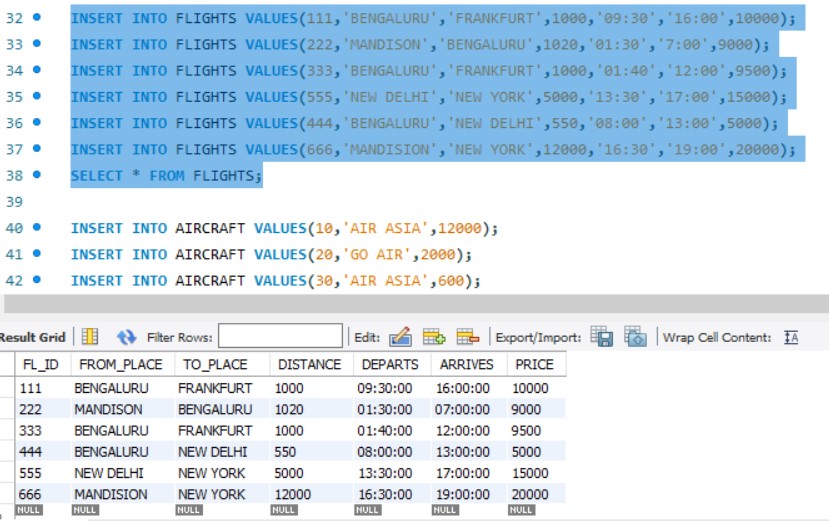
INSERT INTO FLIGHTS VALUES(333,'BENGALURU','FRANKFURT',1000,'01:40','12:00',9500);

INSERT INTO FLIGHTS VALUES(555,'NEW DELHI','NEW YORK',5000,'13:30','17:00',15000);

INSERT INTO FLIGHTS VALUES(444,'BENGALURU','NEW DELHI',550,'08:00','13:00',5000);

INSERT INTO FLIGHTS VALUES(666,'MANDISION','NEW YORK',12000,'16:30','19:00',20000);

SELECT \* FROM FLIGHTS;



INSERT INTO AIRCRAFT VALUES(10,'AIR ASIA',12000);

INSERT INTO AIRCRAFT VALUES(20,'GO AIR',2000);

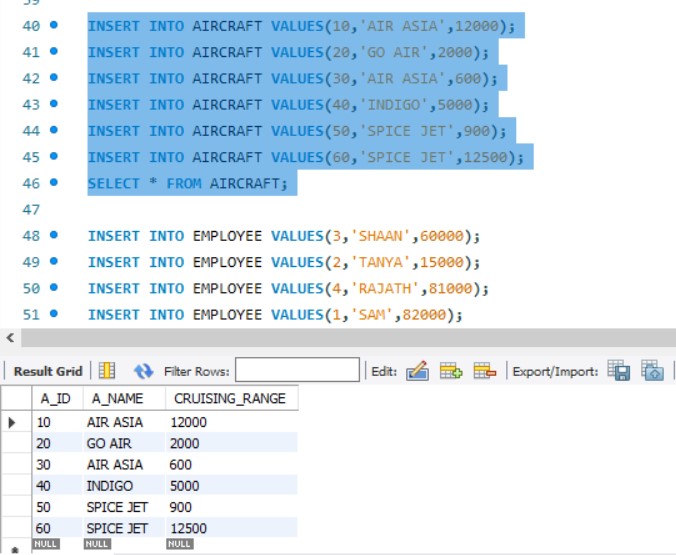
INSERT INTO AIRCRAFT VALUES(30,'AIR ASIA',600);

INSERT INTO AIRCRAFT VALUES(40,'INDIGO',5000);

INSERT INTO AIRCRAFT VALUES(50,'SPICE JET',900);

INSERT INTO AIRCRAFT VALUES(60,'SPICE JET',12500);

SELECT \* FROM AIRCRAFT;



INSERT INTO EMPLOYEE VALUES(3,'SHAAN',60000);

INSERT INTO EMPLOYEE VALUES(2,'TANYA',15000);

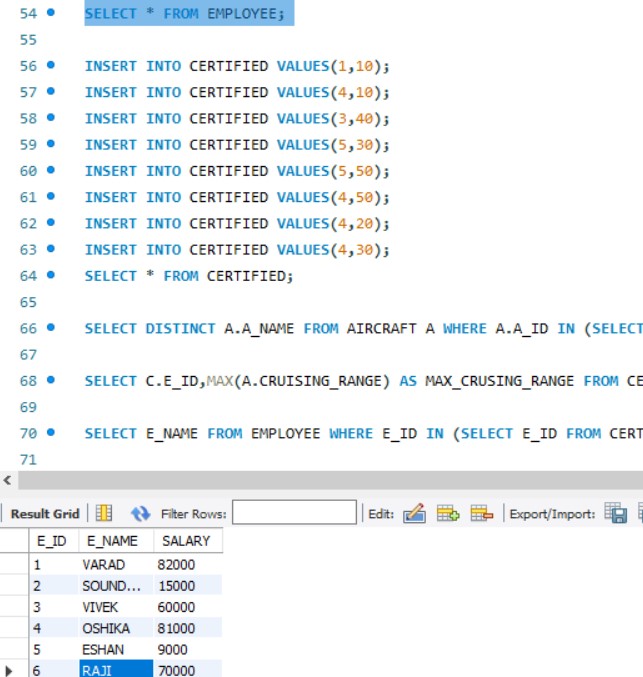
INSERT INTO EMPLOYEE VALUES(4,'RAJATH',81000);

INSERT INTO EMPLOYEE VALUES(1,'SAM',82000);

INSERT INTO EMPLOYEE VALUES(6,'AYMAN',70000);

INSERT INTO EMPLOYEE VALUES(5,'SAAKSHI',9000);

SELECT \* FROM EMPLOYEE;



INSERT INTO CERTIFIED VALUES(1,10);

INSERT INTO CERTIFIED VALUES(4,10);

INSERT INTO CERTIFIED VALUES(3,40);

INSERT INTO CERTIFIED VALUES(5,30);

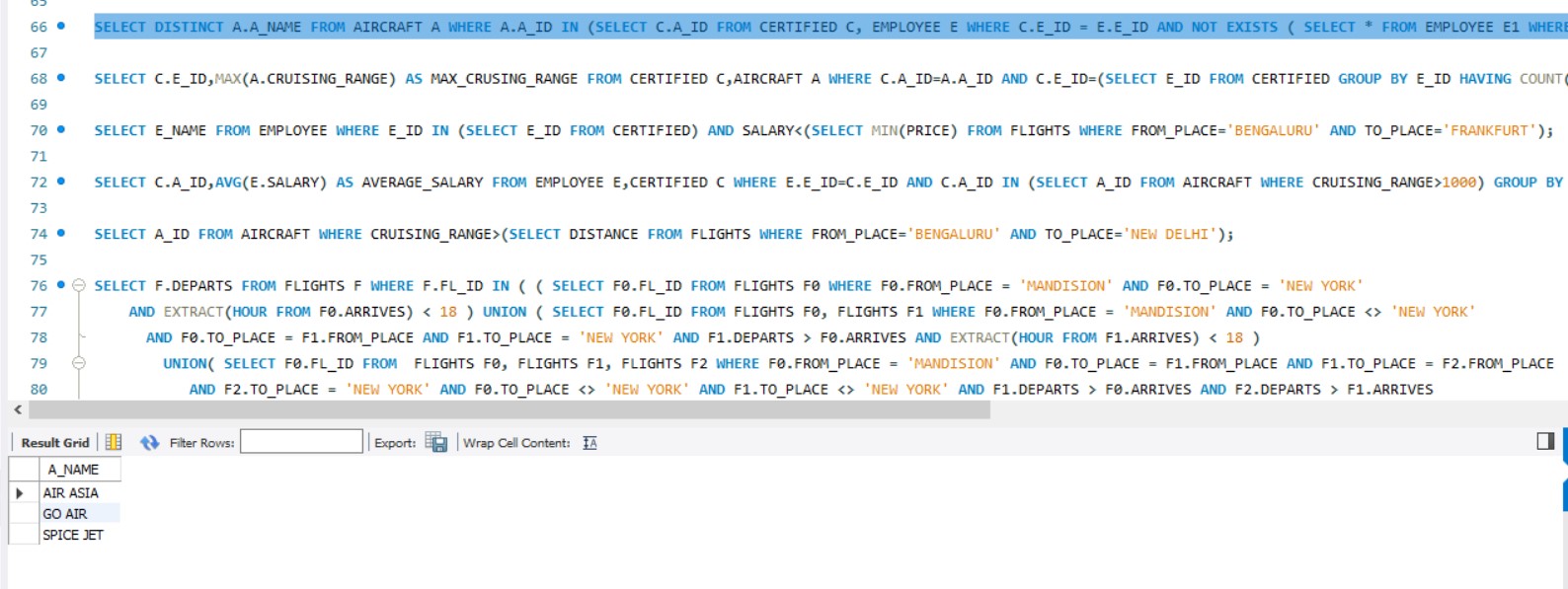
INSERT INTO CERTIFIED VALUES(5,50);

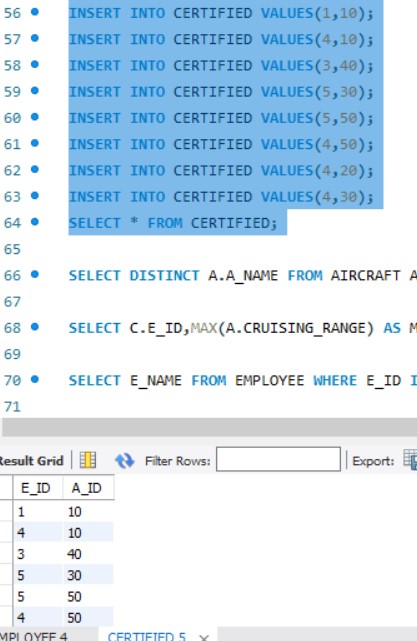
INSERT INTO CERTIFIED VALUES(4,50);

INSERT INTO CERTIFIED VALUES(4,20);

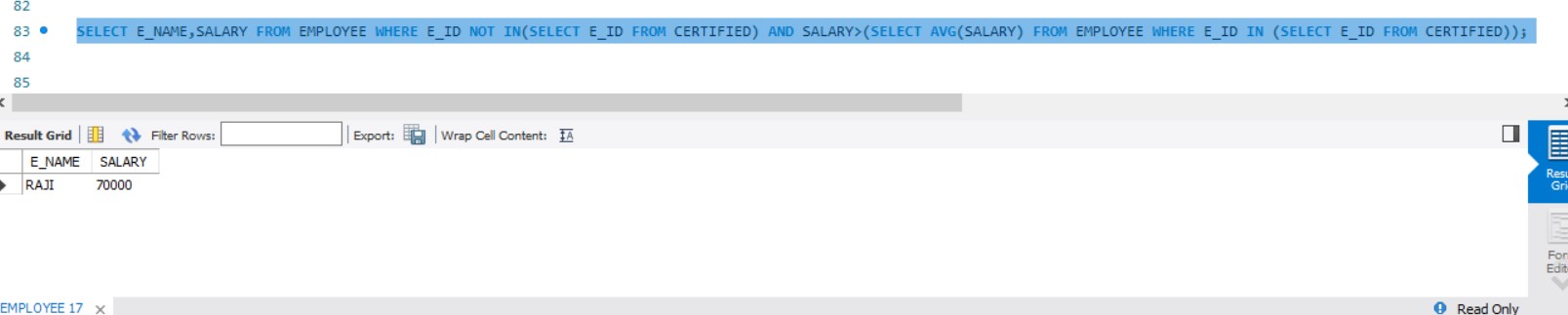
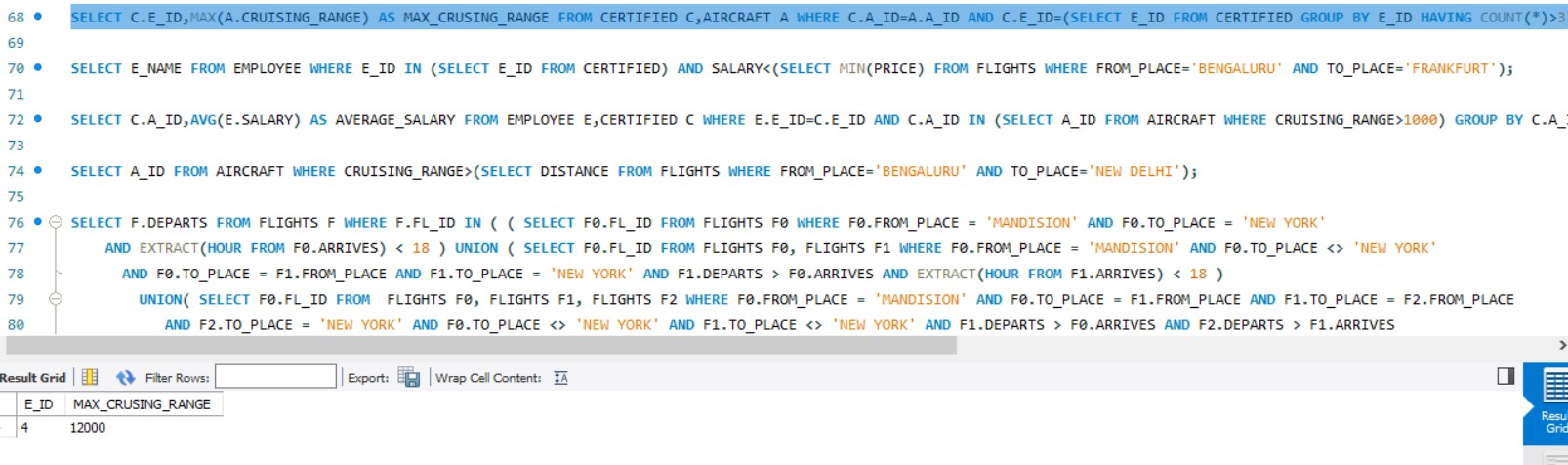
INSERT INTO CERTIFIED VALUES(4,30);

SELECT \* FROM CERTIFIED;

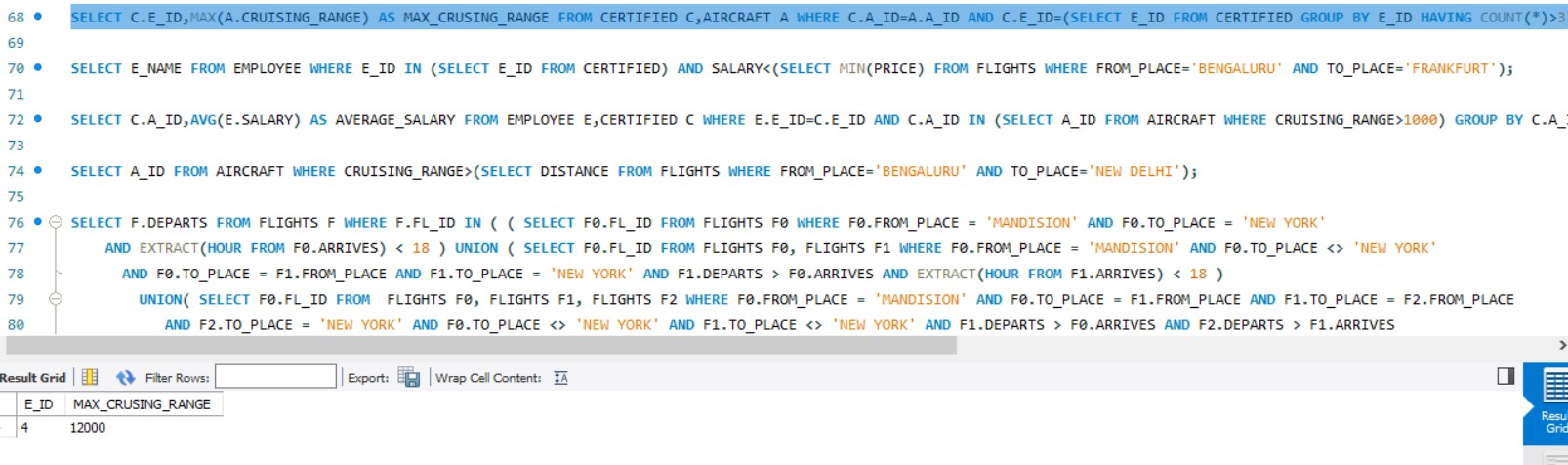




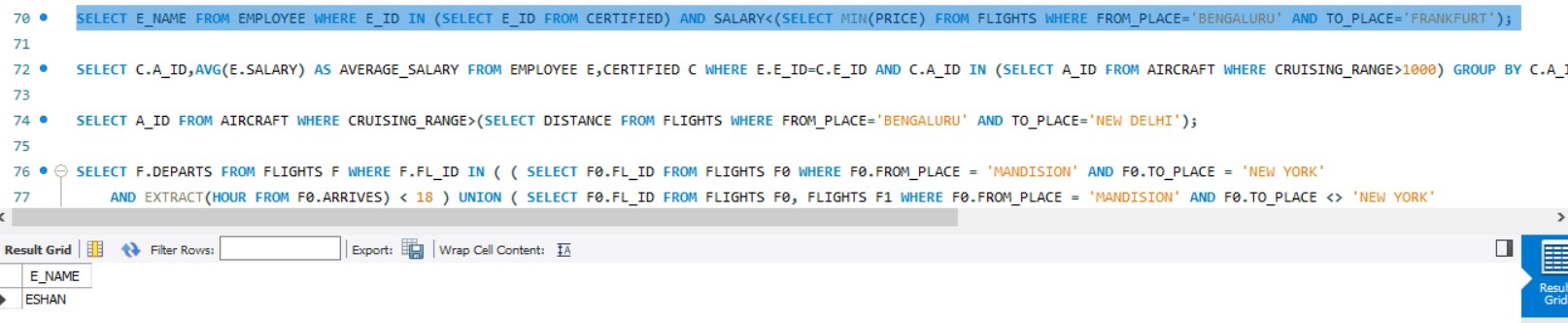
SELECT DISTINCT A.A\_NAME FROM AIRCRAFT A WHERE A.A\_ID IN (SELECT C.A\_ID FROM CERTIFIED C, EMPLOYEE E WHERE C.E\_ID = E.E\_ID AND NOT EXISTS ( SELECT \* FROM EMPLOYEE E1 WHERE E1.E\_ID = E.E\_ID AND E1.SALARY <80000 ));



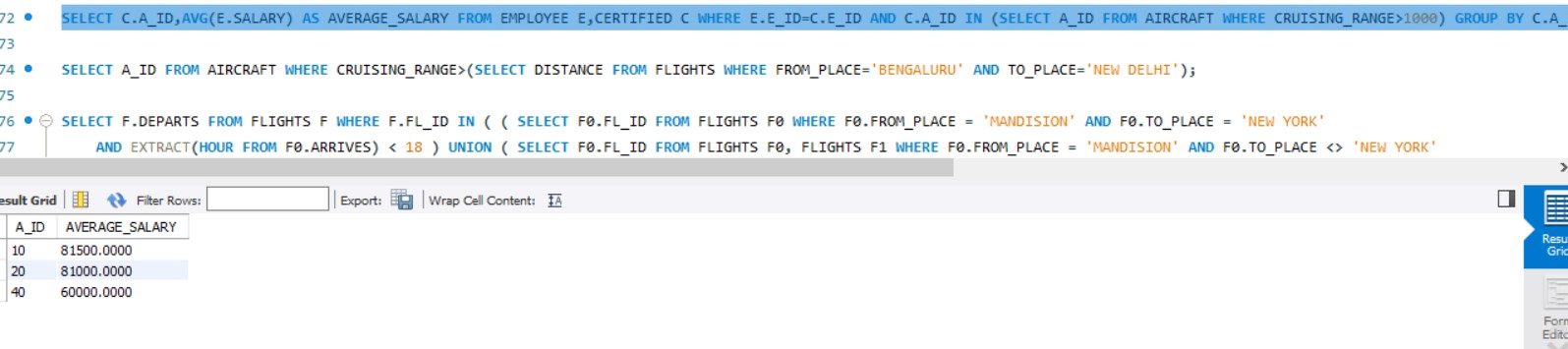
SELECT C.E\_ID,MAX(A.CRUISING\_RANGE) AS MAX\_CRUSING\_RANGE FROM CERTIFIED C,AIRCRAFT A WHERE C.A\_ID=A.A\_ID AND C.E\_ID=(SELECT E\_ID FROM CERTIFIED GROUP BY E\_ID HAVING COUNT(\*)>3);



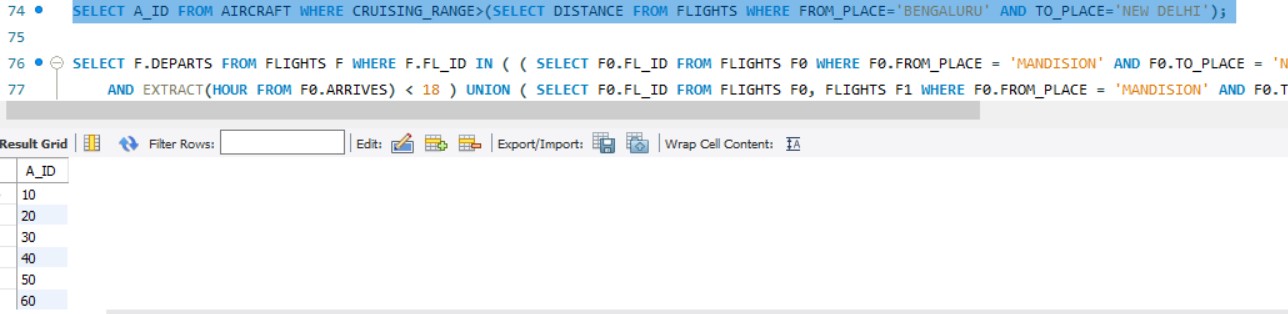
SELECT E\_NAME FROM EMPLOYEE WHERE E\_ID IN (SELECT E\_ID FROM CERTIFIED) AND SALARY<(SELECT MIN(PRICE) FROM FLIGHTS WHERE FROM\_PLACE='BENGALURU' AND TO\_PLACE='FRANKFURT');



SELECT C.A\_ID,AVG(E.SALARY) AS AVERAGE\_SALARY FROM EMPLOYEE E,CERTIFIED C WHERE E.E\_ID=C.E\_ID AND C.A\_ID IN (SELECT A\_ID FROM AIRCRAFT WHERE CRUISING\_RANGE>1000) GROUP BY C.A\_ID;



SELECT A\_ID FROM AIRCRAFT WHERE CRUISING\_RANGE>(SELECT DISTANCE FROM FLIGHTS WHERE FROM\_PLACE='BENGALURU' AND TO\_PLACE='NEW DELHI');



SELECT F.DEPARTS FROM FLIGHTS F WHERE F.FL\_ID IN ( ( SELECT F0.FL\_ID FROM FLIGHTS F0 WHERE F0.FROM\_PLACE = 'MANDISION' AND F0.TO\_PLACE = 'NEW YORK'

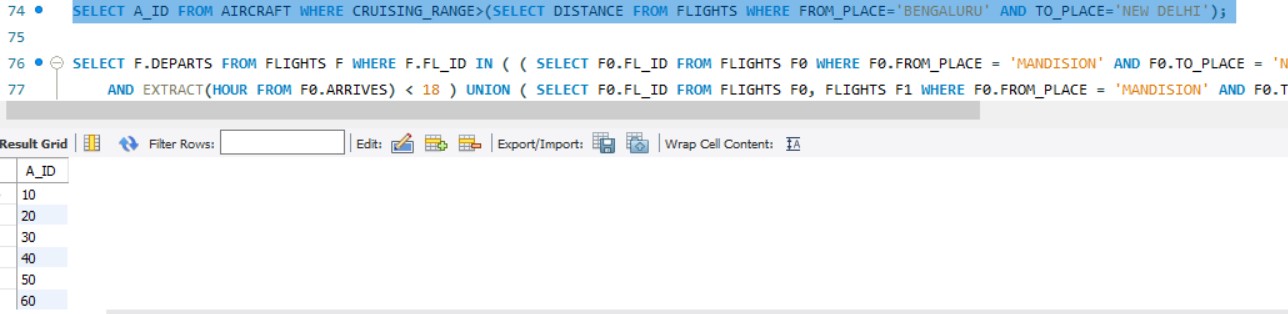
AND EXTRACT(HOUR FROM F0.ARRIVES) < 18 ) UNION ( SELECT F0.FL\_ID FROM FLIGHTS F0, FLIGHTS F1 WHERE F0.FROM\_PLACE = 'MANDISION' AND F0.TO\_PLACE <> 'NEW YORK'

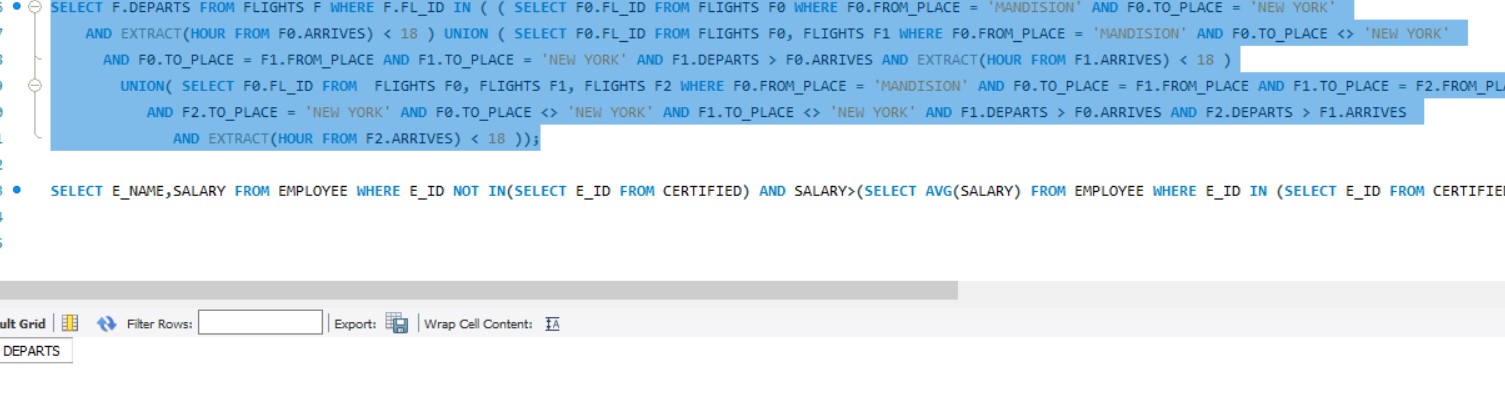
AND F0.TO\_PLACE = F1.FROM\_PLACE AND F1.TO\_PLACE = 'NEW YORK' AND F1.DEPARTS > F0.ARRIVES AND EXTRACT(HOUR FROM F1.ARRIVES) < 18 )

UNION( SELECT F0.FL\_ID FROM FLIGHTS F0, FLIGHTS F1, FLIGHTS F2 WHERE F0.FROM\_PLACE = 'MANDISION' AND F0.TO\_PLACE = F1.FROM\_PLACE AND F1.TO\_PLACE = F2.FROM\_PLACE

AND F2.TO\_PLACE = 'NEW YORK' AND F0.TO\_PLACE <> 'NEW YORK' AND F1.TO\_PLACE <> 'NEW YORK' AND F1.DEPARTS > F0.ARRIVES AND F2.DEPARTS > F1.ARRIVES

AND EXTRACT(HOUR FROM F2.ARRIVES) < 18 ));





SELECT E\_NAME,SALARY FROM EMPLOYEE WHERE E\_ID NOT IN(SELECT E\_ID FROM CERTIFIED) AND SALARY>(SELECT AVG(SALARY) FROM EMPLOYEE WHERE E\_ID IN (SELECT E\_ID FROM CERTIFIED));

