Project 1, Part Two: Hair Salon

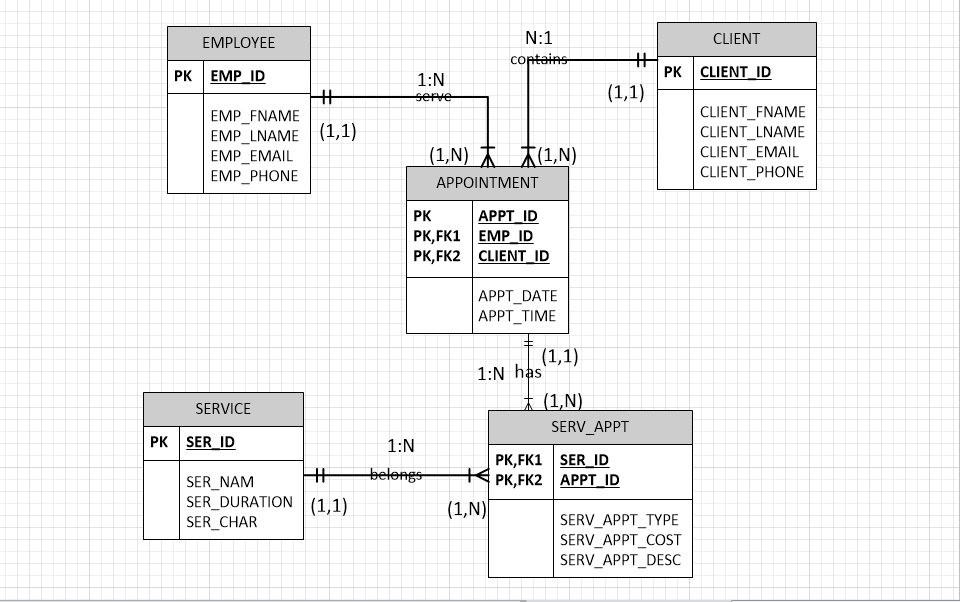
Course name: IT-214

Course number: 007 (Fall 2016)

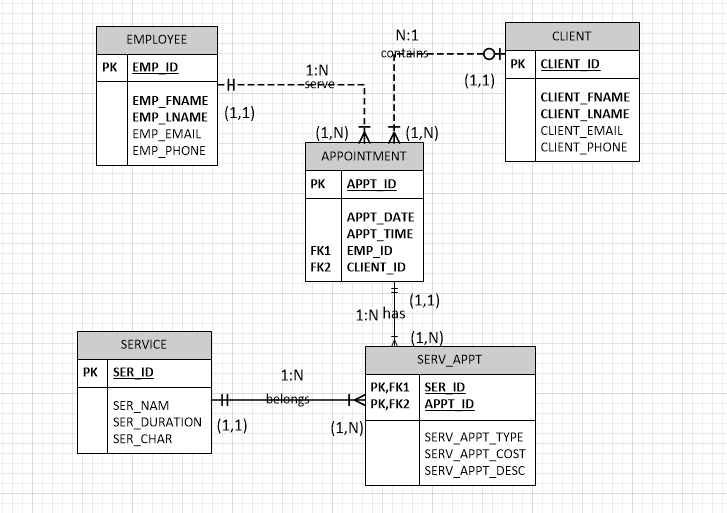
Name of the student: Bandr Alswyan

2- ERD:

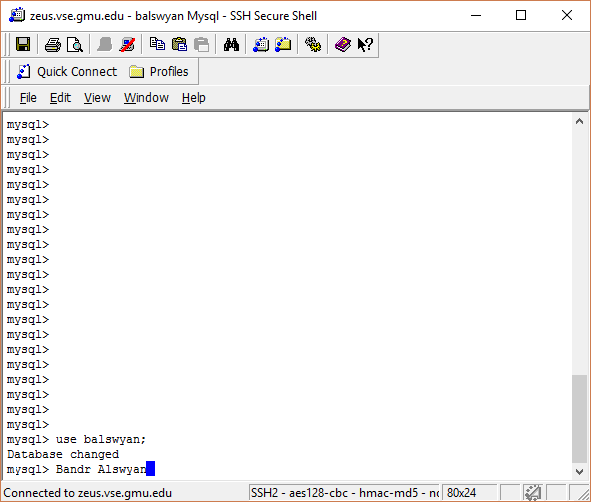
Before Professor Notes:



After Fixing with Notes:

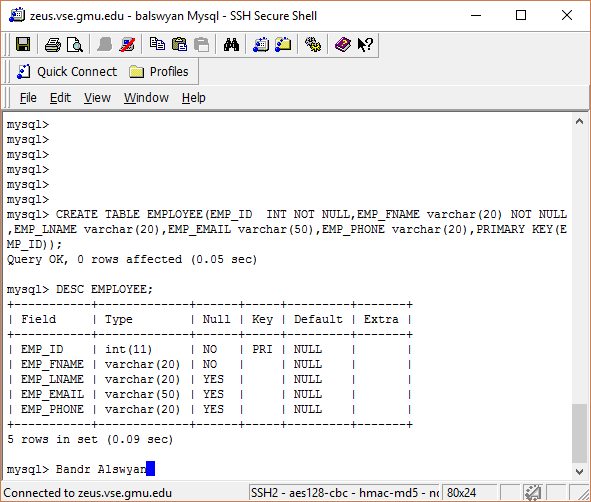


3- a. Chose Database: - use balswyan;



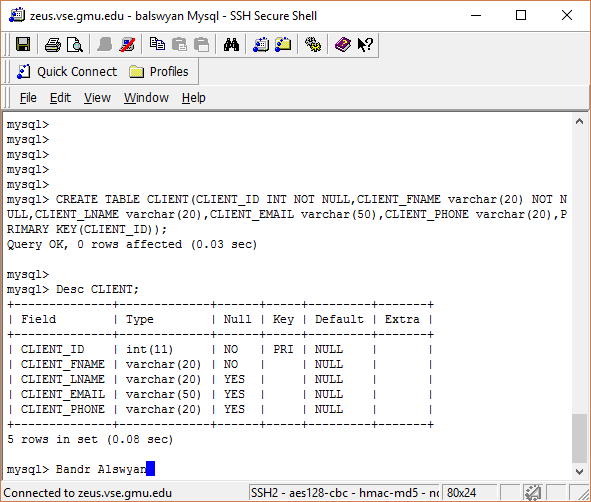
b. - CREATE TABLE EMPLOYEE(EMP\_ID INT NOT NULL,EMP\_FNAME varchar(20) NOT NULL,EMP\_LNAME varchar(20),EMP\_EMAIL varchar(50),EMP\_PHONE varchar(20),PRIMARY KEY(EMP\_ID));

DESC EMPLOYEE;



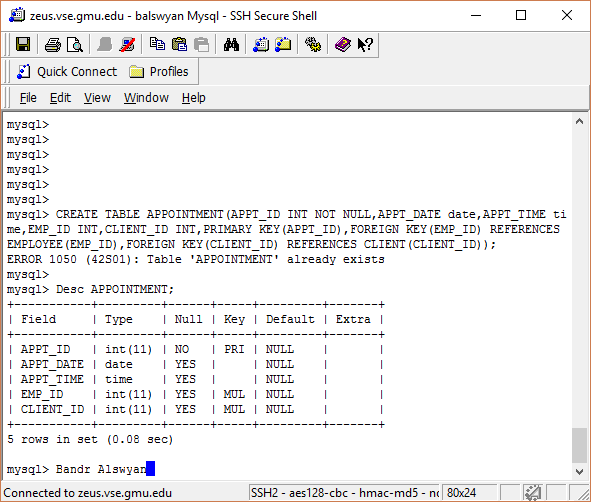
* CREATE TABLE CLIENT(CLIENT\_ID INT NOT NULL,CLIENT\_FNAME varchar(20) NOT NULL,CLIENT\_LNAME varchar(20),CLIENT\_EMAIL varchar(50),CLIENT\_PHONE varchar(20),PRIMARY KEY(CLIENT\_ID));

Desc CLIENT;



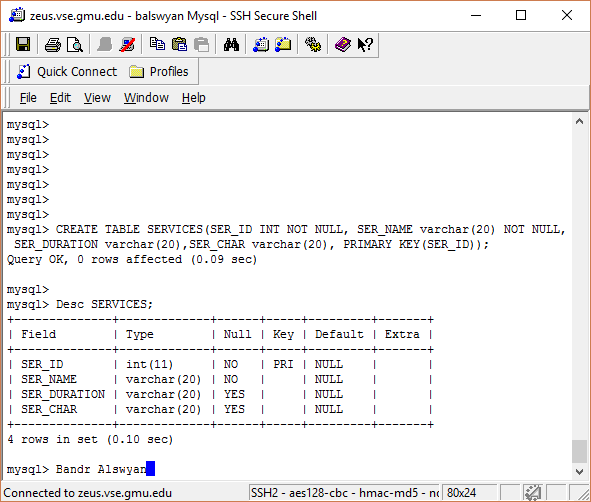
* CREATE TABLE APPOINTMENT(APPT\_ID INT NOT NULL,APPT\_DATE date,APPT\_TIME time,EMP\_ID INT,CLIENT\_ID INT,PRIMARY KEY(APPT\_ID),FOREIGN KEY(EMP\_ID) REFERENCES EMPLOYEE(EMP\_ID),FOREIGN KEY(CLIENT\_ID) REFERENCES CLIENT(CLIENT\_ID));

Desc APPOINTMENT;



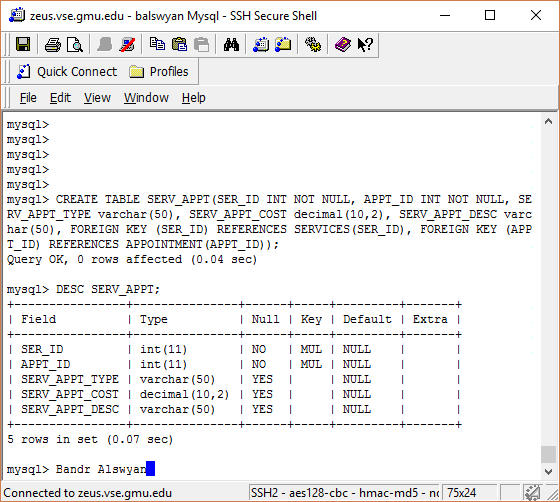
* CREATE TABLE SERVICES(SER\_ID INT NOT NULL, SER\_NAME varchar(20) NOT NULL, SER\_DURATION varchar(20),SER\_CHAR varchar(20), PRIMARY KEY(SER\_ID));

Desc SERVICES;



* CREATE TABLE SERV\_APPT(SER\_ID INT NOT NULL, APPT\_ID INT NOT NULL, SERV\_APPT\_TYPE varchar(50), SERV\_APPT\_COST decimal(10,2), SERV\_APPT\_DESC varchar(50), FOREIGN KEY (SER\_ID) REFERENCES SERVICES(SER\_ID), FOREIGN KEY (APPT\_ID) REFERENCES APPOINTMENT(APPT\_ID));

DESC SERV\_APPT;



C. - INSERT INTO EMPLOYEE (EMP\_ID,EMP\_FNAME,EMP\_LNAME,EMP\_EMAIL,EMP\_PHONE)

VALUES (1,'David','Charlie','david@mail.in',6183893933),(2,'Jack','Martin','jack@mail.in',6189375858),(3,'John','Duild','john@mail.in',6185885858),(4,'Ammy','Joseph','ammy@mail.in',6189375858);

* INSERT INTO CLIENT(CLIENT\_ID,CLIENT\_FNAME,CLIENT\_LNAME,CLIENT\_EMAIL,CLIENT\_PHONE)

VALUES (1,'James','Charlie','charlie@mail.in',6188848933),(2,'Rocky','John','rocky@mail.in',6174848448),(3,'Donald','Perth','donald@mail.in',6185885858),(4,'Masy','Joseph','masy@mail.in',6189375858);

* INSERT INTO APPOINTMENT (APPT\_ID,APPT\_DATE,APPT\_TIME,EMP\_ID,CLIENT\_ID)

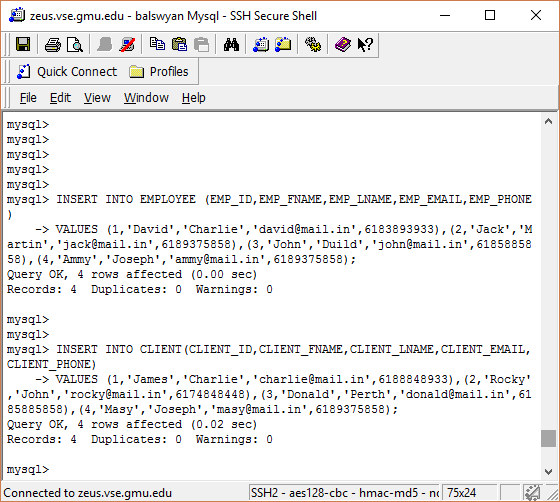
VALUES (1,'2016-10-14','02:23:10',1,2),(2,'2016-9-19','04:24:15',2,2),(3,'2016-10-16','05:26:20',3,1),(4,'2016-10-18','03:46:09',4,4);

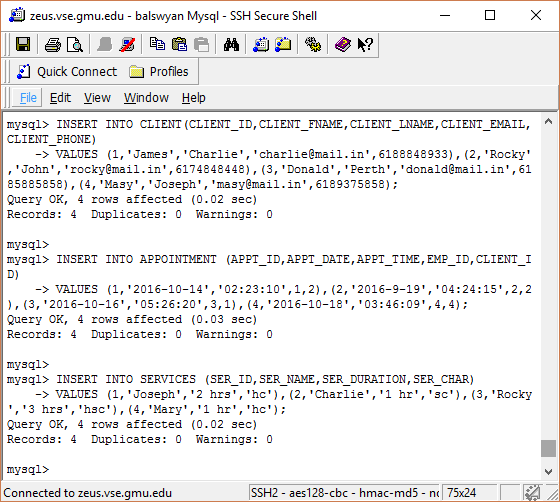
* INSERT INTO SERVICES (SER\_ID,SER\_NAME,SER\_DURATION,SER\_CHAR)

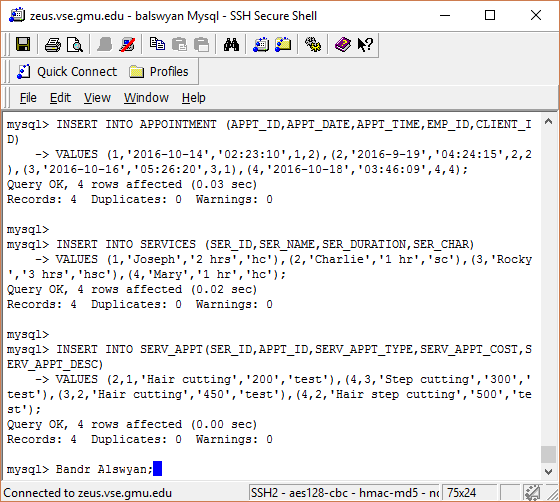
VALUES (1,'Joseph','2 hrs','hc'),(2,'Charlie','1 hr','sc'),(3,'Rocky','3 hrs','hsc'),(4,'Mary','1 hr','hc');

* INSERT INTO SERV\_APPT(SER\_ID,APPT\_ID,SERV\_APPT\_TYPE,SERV\_APPT\_COST,SERV\_APPT\_DESC)

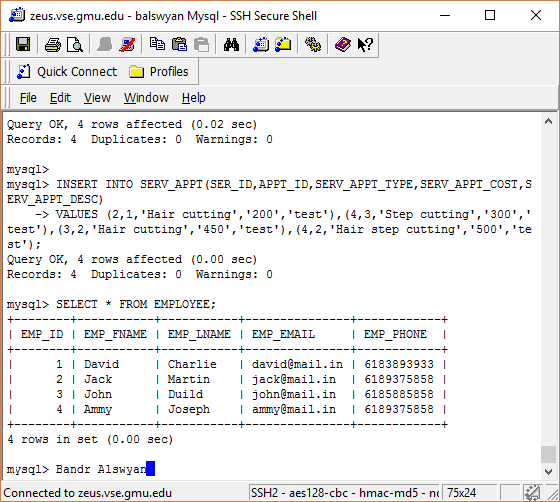
VALUES (2,1,'Hair cutting','200','test'),(4,3,'Step cutting','300','test'),(3,2,'Hair cutting','450','test'),(4,2,'Hair step cutting','500','test');



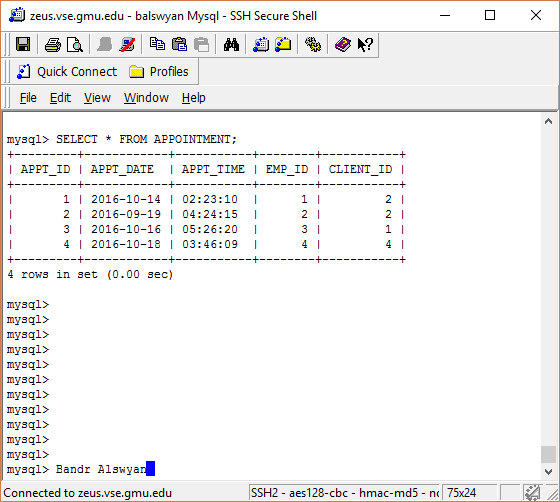




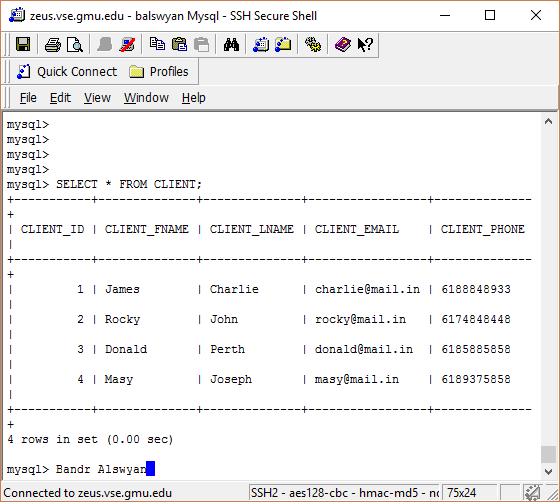
* SELECT \* FROM EMPLOYEE;



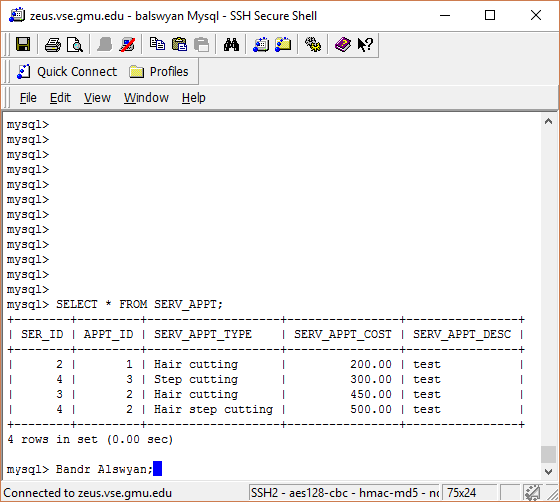
* SELECT \* FROM APPOINTMENT;



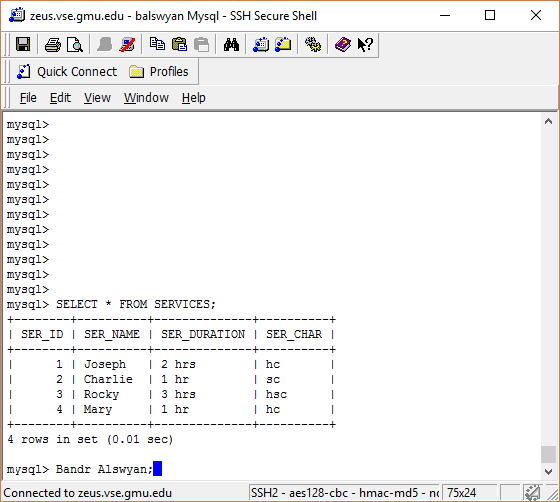
* SELECT \* FROM CLIENT;



* SELECT \* FROM SERV\_APPT;

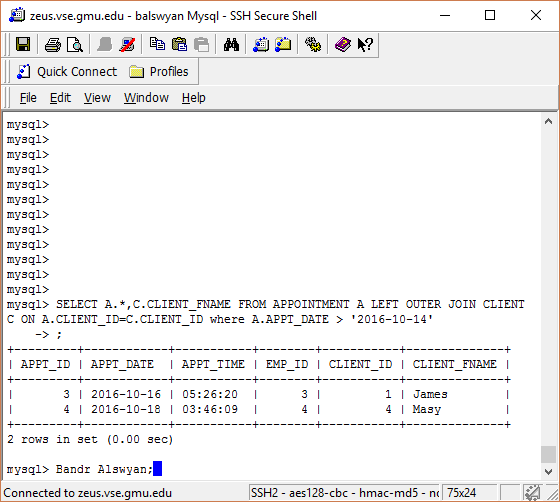


* SELECT \* FROM SERVICES;



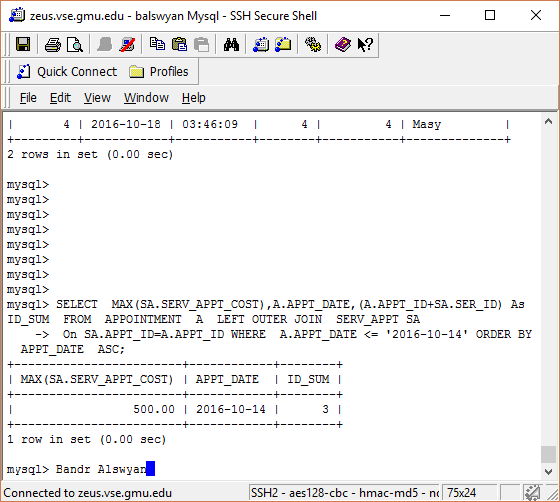
4-

a. SELECT A.\*,C.CLIENT\_FNAME FROM APPOINTMENT A LEFT OUTER JOIN CLIENT C ON A.CLIENT\_ID=C.CLIENT\_ID where A.APPT\_DATE > '2016-10-14' ;

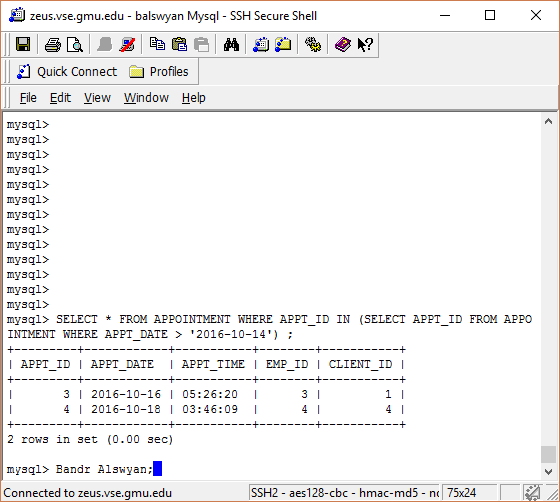


b. SELECT MAX(SA.SERV\_APPT\_COST),A.APPT\_DATE,(A.APPT\_ID+SA.SER\_ID) As ID\_SUM FROM APPOINTMENT A LEFT OUTER JOIN SERV\_APPT SA

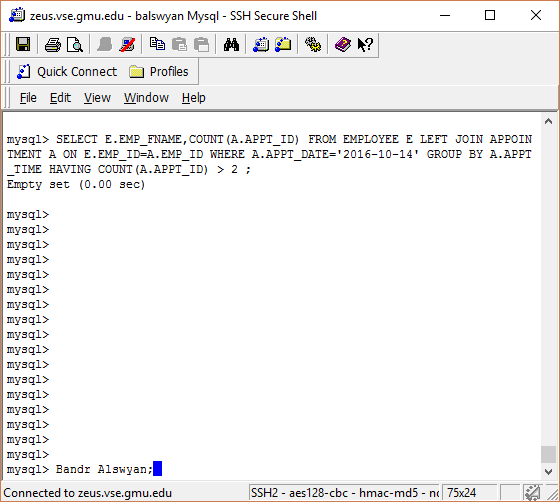
On SA.APPT\_ID=A.APPT\_ID WHERE A.APPT\_DATE <= '2016-10-14' ORDER BY APPT\_DATE ASC;



c. SELECT \* FROM APPOINTMENT WHERE APPT\_ID IN (SELECT APPT\_ID FROM APPOINTMENT WHERE APPT\_DATE > '2016-10-14') ;

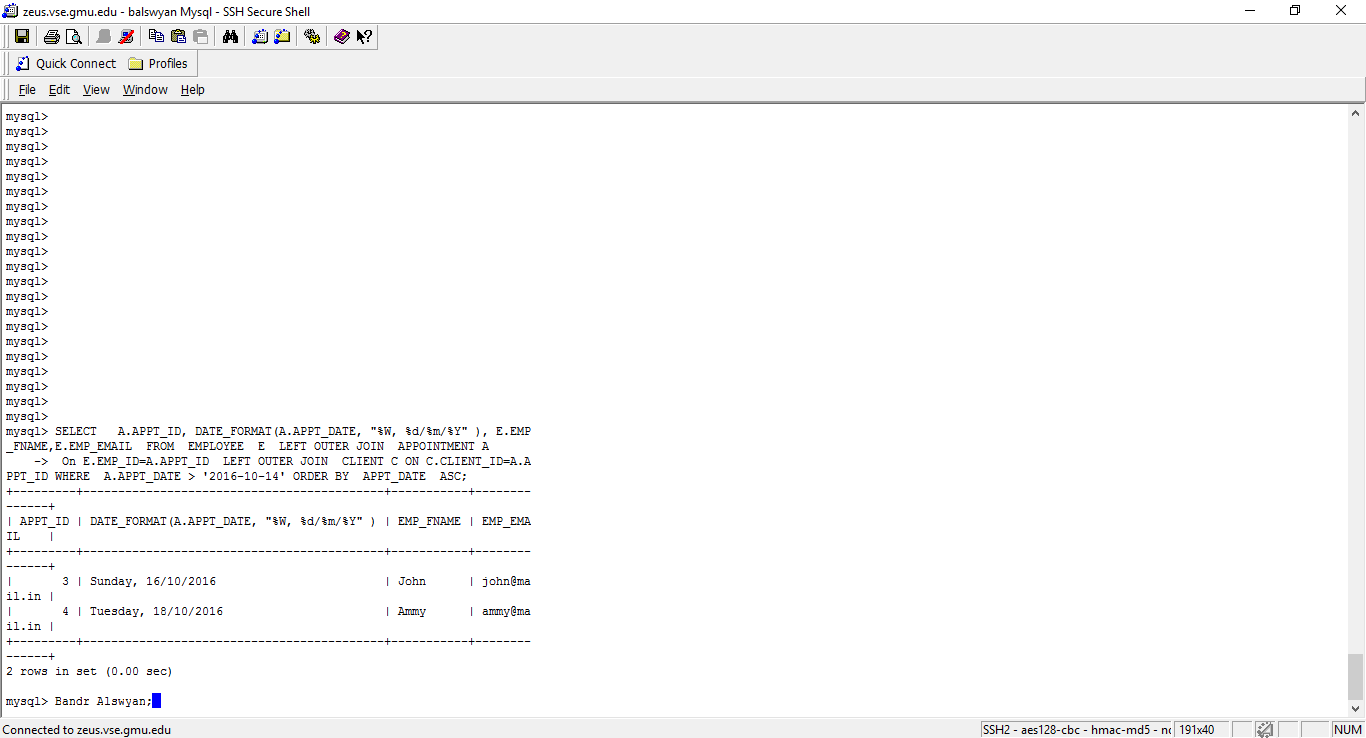


d. SELECT E.EMP\_FNAME,COUNT(A.APPT\_ID) FROM EMPLOYEE E LEFT JOIN APPOINTMENT A ON E.EMP\_ID=A.EMP\_ID WHERE A.APPT\_DATE='2016-10-14' GROUP BY A.APPT\_TIME HAVING COUNT(A.APPT\_ID) > 2 ;



e. SELECT A.APPT\_ID, DATE\_FORMAT(A.APPT\_DATE, "%W, %d/%m/%Y" ), E.EMP\_FNAME,E.EMP\_EMAIL FROM EMPLOYEE E LEFT OUTER JOIN APPOINTMENT A

On E.EMP\_ID=A.APPT\_ID LEFT OUTER JOIN CLIENT C ON C.CLIENT\_ID=A.APPT\_ID WHERE A.APPT\_DATE > '2016-10-14' ORDER BY APPT\_DATE ASC;



SELECT MAX(SA.SERV\_APPT\_COST),A.APPT\_DATE FROM APPOINTMENT A LEFT OUTER JOIN SERV\_APPT SA

On SA.APPT\_ID=A.APPT\_ID WHERE A.APPT\_DATE <= '2016-10-14' ORDER BY APPT\_DATE ASC;

**Explanation:**

First complex query find result from two tables. Table names are EMPLOYEE and APPOINTMENT with help of this query we are getting appointment id(APPT\_ID), Appointment date(APPT\_DATE) in our specific date format, Employee first name(EMP\_FNAME), Employee email(EMP\_EMAIL). We are using Left outer join to join these two tables to get combined result from these two tables. We are also gives certain condition to get result like AAPT\_DATE greater than 2016-10-14. We are getting result in APPT\_DATE in ascending order.



**Explanation:**

Second Complex query find result from three tables EMPLOYEE,APPOINTMENT and CLIENT. We are using Left outer join with three tables. We are getting result APPT\_ID,EMP\_FNAME,EMP\_EMAIL,APPT\_DATE, sum of 2 Ids like APPT\_ID and CLIENT\_ID where APPT\_DATE is greater than and equal to 2016-10-14 and APPT\_TIME is equal to 04:24:15 and our result in order by APPT\_DATE in ascending order.