SQL ASSIGNMENT

- 1. Create a table named tblParents in Student schema, the Create table definition will be as following (minimum 20 entries is required)
 - 1. Parent_id
 - 2. Parents_Name
 - 3. City
 - 4. Age
 - 5. Annual_Income
 - 6. Occupation
 - 7. Email_id

create database Student;

Solution:-

```
use student;

//table Creation

create table tblparents(
parent_id int not null,
parent_name varchar(25) not null,
city varchar(25) not null,
age int not null,
occupation varchar(25) not null,
annual_income decimal(8,0) not null,
email_id varchar(35),
primary key(parent_id)
);
```

//Inserting Values in table

```
insert into tblparents(parent_id,parent_name,city,age,occupation,annual_income) values(1,'Rohan Mehra','allahabad',42,'Private Job',900000), (2,'Karan Singh','delhi',48,'Farmer',800000), (3,'Gohan Khan','Mumbai',52,'Government Job',1000000), (4,'Jahul Khan','chennai',32,'Business Man',600000),
```

```
(5,'Udit Narayan','faridabad',38,'Private Job',1200000),
(6,'Sunil Grover','Ahmedabad',46,'Private Job',300000),
(7,'Kapil Sharma','allahabad',44,'Private Job',1100000),
(8,'Sushi Roy','Mumbai',41,'Private Job',200000),
(9,'Kajal Bisht','Delhi',54,'Goverment Job',700000),
(10, 'Sanjay Bisht', 'Banglore', 37, 'Business Man', 1400000),
(11,'Varun Gupta','Karnataka',63,'Private Job',1700000),
(12, 'Lalit Bisht', 'Ahmedabad', 62, 'Farmer', 500000),
(13, 'Suresh Raghav', 'Chennai', 33, 'Private Job', 800000),
(14, 'Dinesh Chauhan', 'Mumbai', 44, 'Private Job', 700000),
(15, 'Ram Gopal', 'allahabad', 55, 'Farmer', 1800000),
(16, 'Krishna Nandan', 'Delhi', 35, 'Goverment Job', 2000000),
(17, 'Jaspreet Singh', 'allahabad', 43, 'Farmer', 1100000),
(18,'Abhinandan Kargil','Patna',61,'Business Man',1800000),
(19, 'Naveen Bhati', 'Ahmedabad', 59, 'Farmer', 1400000),
(20,'Vivek Kushwaha','Ahmedabad',49,'Private Job',300000)
```

arent_id	parent_name	city	age	occupation	annual_income	email_id
1	Rohan Mehra	allahabad		Private Job	900000	NULL
2	Karan Singh	delhi	48	Farmer	800000	NULL
3	Gohan Khan	Mumbai	52	Goverment Job		NULL
4	Jahul Khan	chennai	32	Business Man	600000	NULL
5	Udit Narayan	faridabad	38	Private Job	1200000	NULL
6	Sunil Grover	Ahmedabad	46	Private Job	300000	NULL
/	Kapil Sharma	allahabad	44	Private Job	1100000	NULL
8	Sushi Roy	Mumbai	41	Private Job	200000	NULL
9	Kajal Bisht	Delhi	54	Goverment Job	700000	NULL
10	Sanjay Bisht	Banglore Karnataka	37	Business Man	1400000 1700000	NULL
11 12	Varun Gupta Lalit Bisht		63 62	Private Job	500000	NULL
		Ahmedabad Chennai	33	Farmer	800000	NULL NULL
13 14	Suresh Raghav Dinesh Chauhan	Chembai	44	Private Job Private Job	700000	NULL
15	Ram Gopal	Mumbal allahabad	55	Farmer	1800000	NULL
16	Kam Gopal Krishna Nandan	arranabau Delhi	35	Goverment Job		NULL
17	Jaspreet Singh	allahabad	43	Farmer	1100000	NULL
18	Abhinandan Kargil	Patna	61	Business Man	1800000	NULL
19	Naveen Bhati	Ahmedabad	59	Farmer	1400000	NULL
20	Vivek Kushwaha	Ahmedabad	49	Private Job	300000	NULL
		Aliiieuabau 			300000	

2. Update email id of each parents as "Na"

Solution:-

SET SQL SAFE UPDATES=0;

Update tblparents set email_id="NA";

Select * from tblparents

```
mysql> update tblparents set email_id="NA";
Query OK, 20 rows affected (0.14 sec)
Rows matched: 20 Changed: 20 Warnings: 0
mysql> select * from tblparents;
                                                                                                                 email_id
  parent_id | parent_name
                                             city
                                                             age
                                                                     occupation
                                                                                           annual_income |
                                             allahabad
                                                               42
48
52
32
38
46
                                                                      Private Job
                                                                                                     900000
                  Rohan Mehra
             1
2
3
4
                  Karan Singh
Gohan Khan
                                             delhi
                                                                                                                 NA
                                                                      Farmer
                                                                                                     800000
                                             Mumbai
                                                                                                    1000000
                                                                                                                 NA
                                                                      Government Job
                  Jahul Khan
Udit Narayan
Sunil Grover
Kapil Sharma
                                             chennai
                                                                     Business Man
                                                                                                     600000
                                                                                                                 NA
                                                                     Private Job
Private Job
Private Job
                                              faridabad
                                                                                                   1200000
                                                                                                                 NA
             6
7
8
9
                                             Ahmedabad
                                                                                                     300000
                                                                                                                 NA
                                                               44
41
54
37
63
62
33
44
55
35
43
                                             allahabad
                                                                                                   1100000
                                                                                                                 NA
                  Sushi Roy
Kajal Bisht
                                                                      Private Job
                                                                                                     200000
700000
                                                                                                                 NA
                                             Mumbai
Delhi
                                                                                                                 NA
                                                                      Goverment Job
                  Sanjay Bisht
Varun Gupta
Lalit Bisht
            10
                                             Banglore
                                                                      Business Man
                                                                                                    1400000
                                                                                                                 NA
                                                                                                   1700000
500000
            11
                                                                     Private Job
                                                                                                                 NA
                                             Karnataka
            12
13
                                                                                                                 NA
                                             Ahmedabad
                                                                      Farmer
                  Suresh Raghav
                                             Chennai
                                                                      Private Job
                                                                                                     800000
                                                                                                                 NA
            14
                                                                      Private Job
                                                                                                                 NA
                  Dinesh Chauhan
                                             Mumbai
                                                                                                     700000
                                             allahabad
                                                                                                    1800000
            15
                                                                                                                 NA
                  Ram Gopal
                                                                      Farmer
           16
                  Krishna Nandan
                                                                                                   2000000
1100000
                                             Delhi
                                                                      Goverment Job
                                                                                                                 NA
                  Jaspreet Singh
Abhinandan Kargil
                                             allahabad
                                                                                                                 NA
                                                                      Farmer
                                                               61
                                                                                                    1800000
            18
                                                                     Business Man
                                                                                                                 NA
                                              Patna
           19
                  Naveen Bhati
                                                                                                    1400000
                                                                                                                 NA
                                             Ahmedabad
                                                               59
                                                                      Farmer
            20
                  Vivek Kushwaha
                                             Ahmedabad
                                                               49
                                                                      Private Job
                                                                                                     300000
                                                                                                                 NA
20 rows in set (0.00 sec)
```

3. Count Nunber of parents whose annual income is more than 6 lakhs

Solution:-

Select count(parent id) from tblparents where annual income>600000;

4. Select parents who are living in city Ahmedabad, Delhi, Mumbai, Chennai, Bangalore

Solution:-

select * from tblparents

where city in ('Ahmedabad','Delhi','Mumbai','Chennai','Bangalore');

arent_id	parent_name	city	age	occupation	annual_income	 email_id
2 3 4 6 8 9 12 13 14 16 19 20	Karan Singh Gohan Khan Jahul Khan Sunil Grover Sushi Roy Kajal Bisht Lalit Bisht Suresh Raghav Dinesh Chauhan Krishna Nandan Naveen Bhati	delhi Mumbai chennai Ahmedabad Mumbai Delhi Ahmedabad Chennai Mumbai Delhi Ahmedabad	+ 48 52 32 46 41 54 62 33 44 35 59 49	Farmer Goverment Job Business Man Private Job Goverment Job Farmer Private Job Private Job Private Job Farmer Job Farmer Frivate Job	800000 1000000 600000 300000 200000 700000 500000 800000 700000 2000000 1400000	NA

5. Write a SQL statement to select parent whose annual_income is less than 5 lakhs otherwise age is more than 45.

Solution:-

Select * from tblparents

Where annual_income<500000 or age>45

parent_id	+ parent_name	+ city	age	occupation	 annual_income	 email_id
	+ Karan Singh	+ delhi	48		+ 800000	 NA
2	Gohan Khan	delli Mumbai	52	Farmer Goverment Job	1000000	NA NA
6	Sunil Grover	Ahmedabad	46	Private Job	300000	NA NA
8	Sushi Roy	Mumbai	41	Private Job	200000	NA
9	Kajal Bisht	Delhi	54	Goverment Job	700000	NA
11	Varun Gupta	Karnataka	63	Private Job	1700000	NA
12	Lalit Bisht	Ahmedabad	62	Farmer	500000	NA
15	Ram Gopal	allahabad	55	Farmer	1800000	NA
18	Abhinandan Kargil	Patna	61	Business Man	1800000	NA
19	Naveen Bhati	Ahmedabad	59	Farmer	1400000	NA
20	Vivek Kushwaha	Ahmedabad	49	Private Job	300000	NA

6. Create students table with student_id, student_name, Math_marks, Science_marks, Parent_id here parent id is foreign key and make connected with parents table using primary key & foreign key

```
Solution:-
use student;
//table Creation
create table students(
student_id int not null,
student name varchar(25) not null,
math marks int not null,
science marks int not null,
parent_id int not null,
primary key(student_id),
foreign key(parent_id) references tblparents(parent_id)
);
//Inserting Values in table
insert into students(student_id,student_name,math_marks,science_marks,parent_id)
values(1,'Raj Mehra',78,76,1),
(2,'Raj Mehra',78,76,1),
(3,'Gaurav',88,76,3),
(4,'Karan',98,76,1),
(5,'Sahil',78,87,3),
(6,'Amar',78,96,8),
(7,'Goku',78,66,2),
(8,'Nobita',71,76,10),
(9,'Chanchal',75,86,11),
(10, 'Ravi', 70, 72, 13);
Select * from students;
```

mysql> select * from students;						
student_id	student_name	math_marks	science_marks	parent_id		
1 2 3 4 5 6 7 8 9	Raj Mehra Raj Mehra Gaurav Karan Sahil Amar Goku Nobita Chanchal	78 78 88 98 78 78 78 71 75	76 76 76 76 87 96 66 76 86	1 1 3 1 3 8 2 10 11		