

Ques 3.

```
mysql> create database twowheeler;
```

```
mysql> create table customer(  
    -> CustId varchar(20) primary key,  
    -> email varchar(50) not null,  
    -> Name char(30) not null,  
    -> phone varchar(10) unique,  
    -> ReferrerID varchar(20));
```

```
mysql> create table BicycleModel(  
    -> ModelNo varchar(10) primary key,  
    -> Manufacturer Char(20) not null,  
    -> Style Varchar(20) not null);
```

```
mysql> create table Bicycle(  
    -> BicycleId varchar(20) primary key,  
    -> DatePurchased date not null,  
    -> Color Char(10) not null,  
    -> CustId varchar(20) not null,  
    -> ModelNo varchar(10) not null,  
    -> foreign key(CustId) references customer(CustId),  
    -> foreign key(ModelNo) references BicycleModel(ModelNo));
```

```
mysql> create table Service(  
    -> StartDate date not null,  
    -> BicycleId varchar(20) not null,  
    -> EndDate date not null,  
    -> Foreign key(BicycleId) references Bicycle(BicycleId));
```

(a) Primary Key - CustId in table Customer

ModelNo in table BicycleModel

BicycleId in table Bicycle

Foreign Key- CustId in table Bicycle

ModelNo in table Bicycle

BicycleId in table Service

```
mysql> insert into customer values(1001,"vks1245@gmail.com","Vinay  
Singh",9873645321,"C1");  
mysql> insert into customer values(1002,"kk4373@gmail.com","Krishna  
Kumar",8373876327,"A2");  
mysql> insert into customer values(1003,"ravishkumar8653@gmail.com","  
Ravish Kumar",9375472814,"C3");  
mysql> insert into customer values(1004,"sumanss7368@gmail.com","Suman  
Singh",8293765392,"B7");  
mysql> insert into customer values(1005,"reenasingh3753@gmail.com","Reena  
Singh",9375428765,"C5");
```

```
mysql> insert into bicyclemodel values("M101","Honda","Activa");  
mysql> insert into bicyclemodel values("M102","Hero","Mastero");  
mysql> insert into bicyclemodel values("M103","Bajaj","Discover");  
mysql> insert into bicyclemodel values("M104","Hero","Splendor");  
mysql> insert into bicyclemodel values("M105","Yamaha","FZ");
```

```
mysql> insert into bicycle values("B501",'2019-02-05',"Red","1002","M101");  
mysql> insert into bicycle  
values("B502",'2018-05-22',"Silver","1001","M105");
```

```
mysql> insert into bicycle values("B503",'2020-01-03',"Red","1004","M104");
mysql> insert into bicycle
values("B504",'2019-04-17',"blue","1003","M103");
mysql> insert into bicycle
values("B505",'2020-02-08',"black","1002","M102");
```

```
mysql> insert into service values('2019-09-09','B505',"2019-09-12");
mysql> insert into service values('2018-10-10','B502','2018-10-12');
mysql> insert into service values('2018-04-24','B502','2019-04-26');
mysql> insert into service values('2019-05-17','B501','2019-05-19');
mysql> insert into service values('2020-01-18','B502','2020-01-20');
```

```
(b) mysql> Select * from customer where custID in(Select custid from
bicycle where modelno in(select Modelno from bicyclemodel where
manufacturer="Honda"));
```

```
(c) mysql> Select * from bicyclemodel where modelno in(select modelno from
bicycle where custid in(select custid from customer where
referrerId="C1"));
```

```
(d) mysql> select bm.manufacturer from bicycle as bi, bicyclemodel as bm
where bi.modelno=bm.modelno and bi.color="red";
```

```
(e) mysql> select modelno from bicycle where bicycleid in(select distinct
bicycleid from service);
```