Q.3)

mysql> create database twowheeler;

mysql> use twowheeler;

mysql> create table customer(

-> CustId varchar(30) primary key,

-> email varchar(45) not null,

-> Name char(20) not null,

-> phone varchar(10) unique,

-> ReferrerID varchar(20));

mysql> create table BicycleModel(

-> ModelNo varchar(15) primary key,

-> Manufacturer Char(25) not null,

-> Style Varchar(25) not null);

mysql> create table Bicycle(

-> BicycleId varchar(30) primary key,

-> DatePurchased date not null,

-> Color Char(10) not null,

-> CustId varchar(30) not null,

-> ModelNo varchar(15) not null,

-> foreign key(CustId) references customer(CustId),

-> foreign key(ModelNo) references BicycleModel(ModelNo));

mysql> create table Service(

-> StartDate date not null,

-> BicycleId varchar(30) not null,

-> EndDate date not null,

-> Foreign key(BicycleId) references Bicycle(BicycleId));

Q (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(101,"kiaara4345@gmail.com","Kiara Das ",9873645321,"C1");

mysql> insert into customer values

(102,"Sheetal1994@gmail.com,"Sheetal Kumari”,8373876327,"A2");

mysql> insert into customer values(103,"rajatkumar8653@gmail.com","Rajat Kumar",9375472814,"C3");

mysql> insert into customer values(104,"kiranjoshi7368@gmail.com","Kiran Joshi",8293765392,"C1");

mysql> insert into customer values(105,"anmolsoni4233@gmail.com","Anmol Soni",9375428765,"C5");

mysql> insert into bicyclemodel values("M101","Honda","bike");

mysql> insert into bicyclemodel values("M102","Honda","Scooty");

mysql> insert into bicyclemodel values("M103","Honda","Scooty");

mysql> insert into bicyclemodel values("M104","Hero","Bike");

mysql> insert into bicyclemodel values("M105","Apache","Sport");

mysql> insert into bicycle values("B501",'2019-02-05',"Black","102","M101");

mysql> insert into bicycle values("B502",'2018-05-22',"Silver","101","M105");

mysql> insert into bicycle values("B503",'2020-01-03',"orange","104","M104");

mysql> insert into bicycle values("B504",'2019-04-17',"blue","103","M103");

mysql> insert into bicycle values("B505",'2020-02-08',"red","102","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);