Q #3:

mysqI> create database bikes;

mysqI> create table customer(

-> Custld varchar(20) primary key,

-> email varchar(50) not null,

-> Name char(30) not null,

-> phone varchar(10) unique,

-> ReferrerlD varchar(20));

mysqI> create table BicycleModel(

-> ModelNo varchar(10) primary key,

-> Manufacturer Char(20) not null,

-> Style Varchar(20) not null);

mysqI> create table Bicycle(

-> Bicycleld varchar(20) primary key,

-> DatePurchased date not null,

-> Color Char(10) not null,

-> Custld varchar(20) not null,

-> ModelNo varchar(10) not null,

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

-> foreign key(ModeINo) references BicycIeModeI(ModeINo));

mysqI> create table Service(

-> StartDate date not null,

-> Bicycleld varchar(20) not null,

-> EndDate date not null,

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

1. Primary Key - Custld in table Customer

ModelNo in table BicycleModel Bicycleld in table Bicycle

Foreign Key- Custld in table Bicycle

ModelNo in table Bicycle Bicycleld in table Service

mysqI> insert into customer values(1001,"Ehsanullahkarim7@gmaiI.com","Ehsankarim",9203115689,"C1");

mysqI> insert into customer values(1002,"ak2000@gmaiI.com","anhisaqu Kaim",8373876327,"A2");

mysqI> insert into customer values([1003,"Ashu007@gmaiI.com","](mailto:1003,%22Ashu007@gmaiI.com%22,%22%20) Ashu Singh",9399472888,"C3");

mysqI> insert into customer values([1004,"sumanss7368@gmaiI.com","Suman](mailto:sumanss7368@gmaiI.com)Singh",8293765392,"B7");

mysqI> insert into customer values([1005,"reenasingh3753@gmaiI.com","Reena](mailto:reenasingh3753@gmaiI.com) Singh",9375428765,"C5");

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

mysqI> insert into bicycle values("B501",'2019-02-05',"Red","1002","M101"); mysqI> insert into bicycle values("B502",’2018-05-22',"SiIver","1001","M105"); mysqI> insert into bicycle values("B503",’2020-01-03',"Red","1004","M104"); mysqI> insert into bicycle values("B504",'2019-04-17',"bIue","1003","M103"); mysqI> insert into bicycle values("B505",'2020-02-08',"green","1002","M102");

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

1. mysqI> Select \* from customer where custlD in(Select custid from bicycle where modelno in(select Modelno from bicyclemodel where manufacturer="Honda"));
2. mysqI> Select \* from bicyclemodel where modelno in(select modelno from bicycle where custid in(select custid from customer where referrerId="C1"));
3. mysqI> select bm.manufacturer from bicycle as bi, bicyclemodel as bm where bi.modeIno=bm.modelno and bi.coIor="red";

mysqI> select modelno from bicycle where bicycleid in(select distinct bicycleid from service);