CREATE TABLES:

1. Customer

```
CREATE TABLE 'customer' (
'Customer id' varchar(6) NOT NULL,
'Customer name' varchar(60) NOT NULL,
'Phone no' bigint(10) DEFAULT NULL,
'CPassword' varchar(15) DEFAULT NULL,
'Dob' date DEFAULT NULL,
'CAddress' varchar(60) DEFAULT NULL,
'Mode' varchar(15) DEFAULT NULL,
'Plan id' varchar(4) NOT NULL,
'Due' int(2) DEFAULT NULL,
'Due amount' decimal(6,2) DEFAULT NULL,
`Recovery_no` bigint(10) NOT NULL,
`Email_id` varchar(30) NOT NULL,
PRIMARY KEY ('Customer_id'),
UNIQUE KEY 'UNIQUE' ('Phone_no'),
UNIQUE KEY 'Pass' ('CPassword')
) ENGINE=InnoDB DEFAULT CHARSET=latin1
```

2. Prepaid

3. Postpaid

```
`Rollover` int(3) DEFAULT NULL,
PRIMARY KEY (`Plan_id`)
) ENGINE=InnoDB DEFAULT CHARSET=latin1
```

4. Broadband

5. Complain

6. Employee

INSERT QUERIES:

1. Broadband

```
INSERT INTO `broadband` (`Plan_id`, `Amount`, `Duration`, `MaxSpeed`, `Data`, `Plan_name`) VALUES ('BB1', '500.00', 28, 100, 75, 'Silver'), ('BB2', '700.00', 30, 200, 100, 'Gold'), ('BB3', '900.00', 45, 300, 130, 'Diamond'), ('BB4', '1200.00', 60, 400, 150, 'Platinum'), ('BB5', '400.00', 24, 100, 40, 'Bronze');
```

2. Complain

```
INSERT INTO `complain` (`Comp_id`, `Customer_id`, `Subject`, `Complaint`, `Status`, `Employee_id`) VALUES

('CP1', 'C4', 'Callertune', 'Cannot set caller tune', 'Solved', '0'),

('CP2', 'C3', 'pleaseword', 'WORK', 'Assigned', 'E3');
```

3. Customer

```
INSERT INTO `customer` (`Customer_id`, `Customer_name`, `Phone_no`, `CPassword`, `Dob`, `CAddress`, `Mode`, `Plan_id`, `Due`, `Due_amount`, `Recovery_no`, `Email_id`) VALUES ('C1', 'samu', 6379021715, 'helpmeplease', '2010-12-24', '93 Gandhi Nagar, Gandhipuram, Coimbatore', 'broadband', 'BB2', 30, '0.00', 7708540454, 'samu@gmail.com'), ('C2', 'indu', 9626947774, 'ohmygod', '2000-12-24', '93 Gandhi Nagar, Gandhipuram, Coimbatore', 'prepaid', 'PR2', 86, '0.00', 7708540454, 'indhu@gmail.com'), ('C3', 'Sarmitha V D', 9422350111, 'sarmi', '2004-04-15', '64, V M Chathira Salai, Tirunelveli', 'broadband', 'BB4', 60, '1200.00', 9443396864, 'sarmi.vds@gmail.com'), ('C4', 'Deivanai D', 6420153801, 'deiva', '1973-12-21', 'Plot No:64,V M Chathira Salai,', 'prepaid', 'PR3', 86, '0.00', 9443110458, 'deivanai.elango@gmail.com'), ('C5', 'Venkata Elango A', 6781924580, 'elango', '1970-10-06', 'Plot No:64,V M Chathira Salai,', 'broadband', 'BB4', 60, '1200.00', 9486020214, 'venkataelango@gmail.com');
```

4. Employee

```
INSERT INTO 'employee' ('Employee_id', 'Employee_name', 'Email_id', 'Salary', 'Designation', 'Password', 'Comp_id') VALUES ('E3', 'Amritha N', 'amritha@gmail.com', 100000, 'Officer', 'E3', 'CP2');
```

5. Postpaid

```
INSERT INTO `postpaid` (`Plan_id`, `Amount`, `Connections`, `Data`, `Rollover`) VALUES ('PP1', '600.00', 2, 80, 200), ('PP2', '750.00', 3, 120, 200), ('PP3', '1000.00', 5, 200, 200),
```

```
('PP4', '400.00', 2, 40, 200),
   ('PP5', '1200.00', 7, 250, 230);
6. Prepaid
   INSERT INTO 'prepaid' ('Plan_id', 'Amount', 'TalkTime', 'Dataperday', 'Validity', 'SMSperday')
   VALUES
   ('PR1', '400.00', 0, '1.0', 50, 150),
   ('PR2', '600.00', 0, '1.5', 80, 200),
   ('PR3', '700.00', 0, '2.0', 86, 300),
   ('PR4', '1000.00', 0, '2.5', 100, 300);
   PROCEDURES:
1. logincheck
   DELIMITER $$
   CREATE DEFINER='root'@'localhost' PROCEDURE 'logincheck'(IN 'num' BIGINT, IN 'pwd'
   VARCHAR(15))
   BEGIN
   select * from customer where Phone no=num AND CPassword=pwd;
   END$$
   DELIMITER;
2. generatePhoneNo
   DELIMITER $$
   CREATE DEFINER='root'@'localhost' PROCEDURE 'generatePhoneNo'()
   BEGIN
   DECLARE RAN BIGINT(20);
   DECLARE CNT INT(1);
   RANDNO: LOOP
          SET RAN=FLOOR(RAND()*(9999999999-1000000000+1))+10000000000;
          SELECT COUNT(*)
          INTO CNT
          FROM customer
          WHERE customer.Phone_no=RAN;
     IF(CNT=0) THEN
          LEAVE RANDNO;
     ELSE
          ITERATE RANDNO;
     END IF;
```

```
END LOOP RANDNO;
   SELECT RAN;
   END$$
   DELIMITER:
3. newuser
   DELIMITER $$
   CREATE DEFINER='root'@'localhost' PROCEDURE 'newuser'(IN 'custid' VARCHAR(10), IN
   'custname' VARCHAR(60), IN 'mobno' BIGINT(20), IN 'pass' VARCHAR(15), IN 'dob' DATE, IN 'addr'
   VARCHAR(60), IN 'mode' VARCHAR(15), IN 'planid' VARCHAR(4), IN 'due' INT(2), IN 'dueamnt'
   DECIMAL(6,2), IN 'recnum' BIGINT(20), IN 'email' VARCHAR(30))
   BEGIN
   INSERT INTO customer (Customer id, Customer name, Phone no, CPassword, Dob, CAddress, Mode,
   Plan id, Due, Due amount, Recovery no, Email id) VALUES
   (custid,custname,mobno,pass,dob,addr,mode,planid,due,dueamnt,recnum,email);
   END$$
   DELIMITER;
4. getDue
   DELIMITER $$
   CREATE DEFINER=`root`@`localhost` PROCEDURE `getDue`(IN `mode ` TEXT, IN `planid`
   VARCHAR(4))
   BEGIN
          IF(mode ='prepaid') THEN
          SELECT Amount, Validity AS Duration FROM prepaid WHERE Plan id=planid;
     ELSEIF(mode ='postpaid') THEN
          SELECT Amount, 30 AS Duration FROM postpaid WHERE Plan id=planid;
     FLSE
          SELECT Amount, Duration FROM broadband WHERE Plan id=planid;
     END IF;
   END$$
   DELIMITER;
5. broadbandcount
   DELIMITER $$
   CREATE DEFINER='root'@'localhost' PROCEDURE 'broadbandcount'()
   BEGIN
          SELECT COUNT(*) AS CNT FROM broadband;
   END$$
```

```
DELIMITER;
6. postpaidcount
   DELIMITER $$
   CREATE DEFINER='root'@'localhost' PROCEDURE 'postpaidcount'()
   BEGIN
          SELECT COUNT(*) AS CNT FROM postpaid;
   END$$
   DELIMITER;
7. prepaidcount
   DELIMITER $$
   CREATE DEFINER='root'@'localhost' PROCEDURE 'prepaidcount'()
   BEGIN
          SELECT COUNT(*) AS CNT FROM prepaid;
   END$$
   DELIMITER;
8. returndue
   DELIMITER $$
   CREATE DEFINER='root'@'localhost' PROCEDURE 'returndue'(IN 'Cid' TEXT)
   BEGIN
          SELECT DUE as Days FROM CUSTOMER WHERE CUSTOMER_ID=Cid;
   END$$
   DELIMITER;
9. newcomplaint
   DELIMITER $$
   CREATE DEFINER=`root`@`localhost` PROCEDURE `newcomplaint`(IN `Phoneno` BIGINT(10), IN
   `subject` TEXT, IN `complaint` TEXT)
   BEGIN
          DECLARE CNT INT(9);
          DECLARE CID,L ID,ID VARCHAR(10);
          SELECT Comp id INTO L ID FROM complain ORDER BY Comp id DESC LIMIT 1;
          SELECT ExtractNumber(L ID)+1 INTO CNT;
     SET ID=CONCAT('C','P',CNT);
     SELECT ID;
          SELECT Customer id INTO CID FROM customer WHERE Phone no=Phoneno;
```

```
INSERT INTO complain (Comp_id,Customer_id,Complaint,Subject,Status)

VALUES(ID,CID,complaint,subject,'Not assigned');

CALL assignCompToEmp(ID);

END$$

DELIMITER;
```

10. addBroadband

DELIMITER \$\$

CREATE DEFINER=`root`@`localhost` PROCEDURE `addBroadband`(IN `planid` VARCHAR(4), IN `amnt` DECIMAL(6,2), IN `duration` INT(3), IN `speed` INT(3), IN `data_` INT(3), IN `planname` VARCHAR(20))

BEGIN

INSERT INTO broadband VALUES(planid,amnt,duration,speed,data_,planname);

END\$\$

DELIMITER;

11. addEmployee

DELIMITER \$\$

CREATE DEFINER=`root`@`localhost` PROCEDURE `addEmployee`(IN `eid` VARCHAR(6), IN `ename` VARCHAR(20), IN `email` VARCHAR(20), IN `salary` INT(6), IN `desig` VARCHAR(20)) BEGIN

INSERT INTO employee(Employee_id,Employee_name,Email_id,Salary,Designation,Password) VALUES(eid,ename,email,salary,desig,eid);

END\$\$

DELIMITER;

12. addPostpaid

DELIMITER \$\$

CREATE DEFINER=`root`@`localhost` PROCEDURE `addPostpaid`(IN `planid` VARCHAR(4), IN `amnt` DECIMAL(6,2), IN `connections` INT(1), IN `data` INT(3), IN `rollover` INT(3))

INSERT INTO postpaid VALUES(planid,amnt,connections,data,rollover);

END\$\$

BEGIN

DELIMITER;

13. assignCompToEmp

DELIMITER \$\$

CREATE DEFINER=`root`@`localhost` PROCEDURE `assignCompToEmp`(IN `CID` VARCHAR(6)) BEGIN

```
DECLARE EID VARCHAR(6);
   DECLARE flag INTEGER DEFAULT 0;
   DECLARE C EMPLOYEE CURSOR FOR SELECT Employee id FROM employee WHERE Comp id IS
   NULL;
   DECLARE CONTINUE HANDLER FOR NOT FOUND SET flag = 1;
   OPEN C EMPLOYEE;
   EMP: LOOP
         IF flag = 0 THEN
         FETCH C EMPLOYEE INTO EID;
      UPDATE employee SET Comp id=CID WHERE Employee id=EID;
      UPDATE complain SET Employee id=EID WHERE Comp id=CID;
      UPDATE complain SET Status='Assigned' WHERE Comp_id=CID;
      LEAVE EMP;
    ELSE
      LEAVE EMP;
    END IF;
   END LOOP EMP;
   CLOSE C EMPLOYEE;
   END$$
   DELIMITER;
14. assignEmpToComp
   DELIMITER $$
   CREATE DEFINER='root'@'localhost' PROCEDURE 'assignEmpToComp'(IN 'EID' VARCHAR(10))
   BEGIN
   DECLARE CID VARCHAR(6);
   DECLARE flag INTEGER DEFAULT 0;
   DECLARE C_COMPLAIN CURSOR FOR SELECT Comp_id FROM complain WHERE Employee_id IS
   NULL;
   DECLARE CONTINUE HANDLER FOR NOT FOUND SET flag = 1;
   OPEN C COMPLAIN;
   COMP: LOOP
         IF flag = 0 THEN
         FETCH C COMPLAIN INTO CID;
      UPDATE employee SET Comp id=CID WHERE Employee id=EID;
      UPDATE complain SET Employee id=EID WHERE Comp id=CID;
      UPDATE complain SET Status='Assigned' WHERE Comp_id=CID;
      LEAVE COMP:
    ELSE
```

```
LEAVE COMP;
     END IF:
   END LOOP COMP:
   CLOSE C COMPLAIN;
   END$$
   DELIMITER;
15. changeEmpPass
   DELIMITER $$
   CREATE DEFINER='root'@'localhost' PROCEDURE 'changeEmpPass' (IN 'pass' VARCHAR(15), IN
   'eid' VARCHAR(6))
   BEGIN
          UPDATE employee SET Password=pass WHERE Employee id=eid;
   END$$
   DELIMITER;
16. changeStatus
   DELIMITER $$
   CREATE DEFINER='root'@'localhost' PROCEDURE 'changeStatus' (IN 'stat' VARCHAR(20), IN 'eid'
   VARCHAR(6), IN 'cid' VARCHAR(6))
   BEGIN
          UPDATE employee SET Comp id=NULL WHERE Employee id=eid;
     IF (stat LIKE 'Solved') THEN
          UPDATE complain SET Status='Solved', Employee id=0 WHERE Comp id=cid;
     ELSE
          UPDATE complain SET Status='Not Assigned', Employee id=NULL WHERE Comp id=cid;
     END IF:
     CALL assignEmpToComp(eid);
   END$$
   DELIMITER;
17. delCustomer
   DELIMITER $$
   CREATE DEFINER='root'@'localhost' PROCEDURE 'delCustomer' (IN 'num' BIGINT(20), IN 'CID'
   VARCHAR(6))
   BEGIN
     DECLARE EID VARCHAR(6);
     DECLARE flag INTEGER DEFAULT 0;
     DECLARE C_DEL CURSOR FOR SELECT Employee_id FROM complain WHERE Customer_id=CID;
```

```
DECLARE CONTINUE HANDLER FOR NOT FOUND SET flag = 1;
     OPEN C DEL;
     DEL: LOOP
         IF flag = 0 THEN
                FETCH C DEL INTO EID;
                UPDATE employee SET Comp id=NULL WHERE Employee id=EID;
                CALL assignEmpToComp(EID);
         ITERATE DEL:
       ELSE
         LEAVE DEL;
       END IF:
     END LOOP DEL;
     CLOSE C DEL;
     DELETE FROM complain WHERE Customer_id=CID;
     DELETE FROM customer WHERE Phone no=num;
   END$$
   DELIMITER;
18. delEmp
   DELIMITER $$
   CREATE DEFINER='root'@'localhost' PROCEDURE 'delEmp'(IN 'eid' VARCHAR(6))
   BEGIN
          DECLARE cid varchar(6);
         SELECT IFNULL(Comp id,'NA') Comp id INTO cid FROM employee WHERE Employee id=eid;
     IF(cid!='NA') THEN
          UPDATE complain SET Status='Not Assigned', Employee id=NULL WHERE Employee id=eid;
       CALL assignCompToEmp(cid);
     END IF;
     DELETE FROM employee WHERE Employee id=eid;
   END$$
   DELIMITER;
19. dueAfterPayment
   DELIMITER $$
   CREATE DEFINER=`root`@`localhost` PROCEDURE `dueAfterPayment`(IN `num` BIGINT(20))
   BEGIN
         UPDATE customer SET Due amount=0 WHERE Phone no=num;
   END$$
   DELIMITER:
```

```
20. empcheck
   DELIMITER $$
   CREATE DEFINER='root'@'localhost' PROCEDURE 'empcheck' (IN 'eid' VARCHAR(6), IN 'pass'
   VARCHAR(15))
   BEGIN
          SELECT * FROM employee WHERE Employee id=eid AND Password=pass;
   END$$
   DELIMITER;
21. addPrepaid
   DELIMITER $$
   CREATE DEFINER='root'@'localhost' PROCEDURE 'addPrepaid'(IN 'planid' VARCHAR(4), IN
   'amount' DECIMAL(6,2), IN 'talk' INT(11), IN 'data' DECIMAL(3,1), IN 'valid' INT(3), IN 'sms' INT(3))
   BEGIN
          INSERT INTO prepaid VALUES(planid,amount,talk,data,valid,sms);
   END$$
   DELIMITER:
22. generateID
   DELIMITER $$
   CREATE DEFINER=`root`@`localhost` PROCEDURE `generateID`(IN `table ` VARCHAR(15))
   BEGIN
          DECLARE cnt varchar(10);
     IF (table ='customer') THEN
                 SELECT Customer id INTO cnt from customer ORDER BY Customer id DESC LIMIT 1;
     ELSEIF (table ='prepaid') THEN
          SELECT Plan id INTO cnt from prepaid ORDER BY Plan id DESC LIMIT 1;
     ELSEIF (table ='postpaid') THEN
          SELECT Plan id INTO cnt from postpaid ORDER BY Plan id DESC LIMIT 1;
     ELSEIF (table ='broadband') THEN
          SELECT Plan_id INTO cnt from broadband ORDER BY Plan_id DESC LIMIT 1;
     ELSEIF (table ='employee') THEN
          SELECT Employee id INTO cnt from employee ORDER BY Employee id DESC LIMIT 1;
     END IF;
     SELECT ExtractNumber(cnt)+1 AS id;
   END$$
   DELIMITER:
```

23. getBestPrepaid

DELIMITER \$\$

CREATE DEFINER='root'@'localhost' PROCEDURE 'getBestPrepaid'()

BEGIN

SELECT * FROM prepaid WHERE Amount=(SELECT MAX(Amount) FROM prepaid);

END\$\$

DELIMITER;

24. getBestPostpaid

DELIMITER \$\$

CREATE DEFINER='root'@'localhost' PROCEDURE 'getBestPostpaid'()

BEGIN

SELECT * FROM postpaid WHERE Amount=(SELECT MAX(Amount) FROM postpaid);

END\$\$

DELIMITER;

25. updateBroadband

DELIMITER \$\$

CREATE DEFINER=`root`@`localhost` PROCEDURE `updateBroadband`(IN `planid` VARCHAR(4), IN `amnt` DECIMAL(6,2), IN `dur` INT(3), IN `speed` INT(3), IN `data_` INT(3), IN `pname` VARCHAR(20)) BEGIN

UPDATE broadband SET Amount=amnt, Duration=dur, MaxSpeed=speed, Data=data_, Plan_name=pname WHERE Plan_id=planid;

END\$\$

DELIMITER;

26. updateEmployee

DELIMITER \$\$

CREATE DEFINER=`root`@`localhost` PROCEDURE `updateEmployee`(IN `eid` VARCHAR(6), IN `ename` VARCHAR(20), IN `email` VARCHAR(20), IN `salary` INT(6), IN `desig` VARCHAR(20)) BEGIN

UPDATE employee SET

Employee_name=ename,Email_id=email,Salary=salary,Designation=desig WHERE Employee_id=eid; END\$\$

DELIMITER;

27. updatePrepaid

DELIMITER \$\$

CREATE DEFINER=`root`@`localhost` PROCEDURE `updatePrepaid`(IN `planid` VARCHAR(4), IN `amnt` DECIMAL(6,2), IN `talk` INT(11), IN `data_` DECIMAL(3,1), IN `valid` INT(3), IN `sms` INT(3)) BEGIN

UPDATE prepaid SET Amount=amnt, TalkTime=talk, Dataperday=data_, Validity=valid, SMSperday=sms WHERE Plan id=planid;

END\$\$

DELIMITER:

28. updateuser

DELIMITER \$\$

CREATE DEFINER='root'@'localhost' PROCEDURE 'updateuser'(IN 'name' VARCHAR(60), IN 'addr' VARCHAR(60), IN 'email' VARCHAR(30), IN 'recnum' BIGINT(20), IN 'pass' VARCHAR(15), IN 'num' BIGINT(20))

BEGIN

UPDATE customer SET

Customer_name=name,CAddress=addr,Email_id=email,Recovery_no=recnum,CPassword=pass WHERE Phone_no=num;

END\$\$

DELIMITER;

29. updateuserplan

DELIMITER \$\$

CREATE DEFINER=`root`@`localhost` PROCEDURE `updateuserplan`(IN `planid` VARCHAR(4), IN `mode_` VARCHAR(15), IN `due_` INT(2), IN `dueamnt` DECIMAL(6,2), IN `usernum` BIGINT(20)) BEGIN

UPDATE customer SET

Plan_id=planid,Mode=mode_,Due=due_,Due_amount=Due_amount+dueamnt WHERE

Phone no=usernum;

END\$\$

DELIMITER;

30. updatePostpaid

DELIMITER \$\$

CREATE DEFINER=`root`@`localhost` PROCEDURE `updatePostpaid`(IN `planid` VARCHAR(4), IN `amnt` DECIMAL(6,2), IN `connections` INT(1), IN `data` INT(3), IN `rollover` INT(3))
BEGIN

UPDATE postpaid SET Amount=amnt,Connections=connections,Data=data,Rollover=rollover WHERE Plan_id=planid;

END\$\$

```
DELIMITER;
```

FUNCTION:

1. ExtractNumber

DELIMITER;

```
DELIMITER $$
CREATE DEFINER='root'@'localhost' FUNCTION 'ExtractNumber'(in_string VARCHAR(50))
RETURNS int(11)
  NO SQL
BEGIN
  DECLARE ctrNumber VARCHAR(50);
  DECLARE finNumber VARCHAR(50) DEFAULT ";
  DECLARE sChar VARCHAR(1);
  DECLARE inti INTEGER DEFAULT 1;
  IF LENGTH(in_string) > 0 THEN
    WHILE(inti <= LENGTH(in_string)) DO
      SET sChar = SUBSTRING(in_string, inti, 1);
      SET ctrNumber = FIND_IN_SET(sChar, '0,1,2,3,4,5,6,7,8,9');
      IF ctrNumber > 0 THEN
        SET finNumber = CONCAT(finNumber, sChar);
      END IF;
      SET inti = inti + 1;
    END WHILE;
    RETURN CAST(finNumber AS UNSIGNED);
  ELSE
    RETURN 0;
  END IF;
END$$
```