MILITARY DATABASE MANAGEMENT PROJECT

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Problem Statement :-

In this project, we have designed a database management system to store information about the Indian Military. The database will contain important information about the Army and will be accessible to Army Officials and the Government.

This database will contain the personal details of the soldiers, posting of soldiers, information about the various battalions of the Army, inventory list and medical supplies of military bases, military vehicles, information about soldiers martyred during the war, awards and honors conferred upon the soldiers for their contributions on and off the battlefield, etc.

This database management system will help the Government and the Military Administration to access various types of information quickly and provide resources to the military on time. Assignment of troops to the warfront and formation of special taskforces can be done quickly. They can keep track of the weapons and supplies during wartime and assess how many more weapons will be needed. They can efficiently find soldiers who are currently serving in a particular regiment and also the soldiers who have served in previous operations.

Contents:

Tables :-

1. SOLDIER

Attribute	**Datatype**	**Constraints and Characteristics**
SoldierID	VARCHAR2(20)	Primary key
Sname	VARCHAR2(20)	Not null
DOB	DATE	Not null
DOJ	DATE	Not null
Height	INT	Not null
Weight	INT	Not null
Gender	CHAR	Not null
District	VARCHAR2(20)	Foreign key, Not null
RegimentCode	VARCHAR2(20)	Foreign key, Not null
OperationCode	VARCHAR2(20)	Foreign key, Not null
Srank	VARCHAR2(20)	Foreign key, Not null

2. REGIMENT

Attribute	**Datatype**	**Constraints and Characteristics**
RegimentCode	VARCHAR2(20)	Primary key
Rname	VARCHAR2(20)	Not null
HQCity	VARCHAR2(20)	Not null
CurrStrength	INT	Not null
MaxStrength	INT	Not null
CommanderID	VARCHAR2(20)	Not null

3. LOCATION

Attribute	Datatype	Constraints and Characteristics
District	VARCHAR2(20)	Primary key
State	VARCHAR2(20)	Not null
Country	VARCHAR2(20)	Not null

4. FAMILY

Attribute	Datatype	Constraints and Characteristics
FatherName	VARCHAR2(20)	Primary key(1)
SoldierID	VARCHAR2(20)	Primary key(2), Foreign key
Children	INT	-
Marital Status	CHAR	Not null

5. POSTING

Attribute	Datatype	Constraints and Characteristics
FromDate	DATE	Not null
TillDate	DATE	Not null
SoldierID	VARCHAR2(20)	Foreign key, not null
District	VARCHAR2(20)	Foreign key, not null

6. MEDALS

Attribute	Datatype	Constraints and Characteristics
MedalID	VARCHAR2(20)	Primary key
MedalName	VARCHAR2(20)	Not null
Prize	INT	Not null

7. HONORS

Attribute	Datatype	Constraints and Characteristics
MedalID	VARCHAR2(20)	Foreign key, Not null
SoldierID	VARCHAR2(20)	Foreign key, Not null

8. SALARY

Attribute	Datatype	Constraints and Characteristics
sRank	VARCHAR2(20)	Primary key
Salary	INT	Not null

9. WEAPONS_INVENTORY

Attribute	Datatype	Constraints and Characteristics
RegimentCode	VARCHAR2(20)	Primary key(1), Foreign key
WeaponID	VARCHAR2(20)	Primary key(2), Foreign key
Quantity	INT	Not null

10. VEHICLE_INVENTORY

Attribute	Datatype	Constraints and Characteristics
RegimentCode	VARCHAR2(20)	Primary key(1), Foreign key
VehicleID	VARCHAR2(20)	Primary key(2), Foreign key
Quantity	INT	Not null

11. EQUIPMENTS_INVENTORY

Attribute	Datatype	Constraints and Characteristics
RegimentCode	VARCHAR2(20)	Primary key(1), Foreign key
EquipmentID	VARCHAR2(20)	Primary key(2), Foreign key
Quantity	INT	Not null

12. WEAPON

Attribute	Datatype	Constraints and Characteristics
WeaponID	VARCHAR2(20)	Primary key
Wname	VARCHAR2(20)	Not null
Wtype	VARCHAR2(20)	Not null

13. VEHICLE

Attribute	Datatype	Constraints and Characteristics
VehicleID	VARCHAR2(20)	Primary key
Vname	VARCHAR2(20)	Not null
Vtype	VARCHAR2(20)	Not null
FuelType	VARCHAR2(20)	Not null
ManYear	INT	Not null

14. EQUIPMENT

Attribute	Datatype	Constraints and Characteristics
EquipmentID	VARCHAR2(20)	Primary key
Ename	VARCHAR2(20)	Not null
Etype	VARCHAR2(20)	Not null

15. OPERATION

Attribute	Datatype	Constraints and Characteristics
OperationCode	VARCHAR2(20)	Primary key
Oname	VARCHAR2(20)	Not null
StartDate	DATE	Not null
EndDate	DATE	-
Outcome	VARCHAR2(20)	-

ER Model Assumptions-

- A Soldier can participate in at most one operation while an operation can involve multiple number of soldiers. Each Operation must involve some soldier hence Total participation.
- A Soldier is given salary on the basis of his Rank/Position in the Army.
- Multiple Soldiers are grouped to form a regiment. Each Soldier must be a part of one or the other regiment hence there is a total participation of Soldiers in this relationship.
- A Soldier can be honored by multiple medals and a particular medal can be awarded to multiple number of Soldiers hence there is a M:N relationship between the two entities.
- Each Soldier has a family whose details are stored in the form of Father's name, Number of children and his/her marital status.
- There are three inventories which belong to a particular regiment namely – Weapons inventory, Vehicle Inventory and Equipment Inventory.
- A Soldier's posting information involve the period of time for which he/she was or will be posted in that particular region. The period of time for which the Soldier is posted will already be predefined by the Army (We already know the deadline date in the future).
- There is a Location table which will serve two purposes – Storing the detailed address of the Soldier and storing the detailed address of all the places where a Soldier has been posted.

Functional Dependencies and Primary Key-

1) Soldier-

SoldierID -> {Sname, DOB, DOJ, Weight, Height, Gender, District, RegimentCode, Srank}
Since all the fields depend on SoldierID, $(SoldierID)^+$ -> R.
Hence, SoldierID is Primary Key.

2) **Regiment**-
RegimentCode -> {Rname, HQCity, CurrStrength, MaxStrength, CommanderID}
{Rname, HQCity} -> {CurrStrength, MaxStrength}
Since all the fields depend on RegimentCode, $(RegimentCode)^+$ -> R.
Hence, RegimentCode is Primary Key.

3) **Location**-
District -> {State, Country}
Since all the fields depend on District, $(District)^+$ -> R.
Hence, District is Primary Key.

4) **Family**-
{FatherName, SoldierID} -> {Children, MaritalStatus}
Since all the fields depend on {FatherName, SoldierID}, $(\{FatherName, SoldierID\})^+$ -> R.
Hence, {FatherName, SoldierID} is Primary Key.

5) Posting relation

6) **Medals**-
MedalID -> {MedalName, Prize}
Since all the fields depend on MedalID, $(MedalID)^+$ -> R.
Hence, MedalID is Primary Key.

7) Honors relation

8) Salary
Srank->salary
Since all the fields depend on Srank, $(Srank)^+$ -> R.
Hence, Srank is Primary Key.

9) Weapons_Inventory
{RegimentCode, WeaponID} -> Quantity
Since all the fields depend on {RegimentCode, WeaponID}, $(\{RegimentCode, WeaponID\})^+$ -> R.
Hence, {RegimentCode, WeaponID} is Primary Key.

10) Vehicle_Inventory

{RegimentCode, VehicleID} -> Quantity

Since all the fields depend on {RegimentCode, VehicleID}, ({RegimentCode, VehicleID})$^+$ -> R.

Hence, {RegimentCode, VehicleID} is Primary Key.

11) Equipment_Inventory

{RegimentCode, VehicleID} -> Quantity

Since all the fields depend on {RegimentCode, VehicleID}, ({RegimentCode, VehicleID})$^+$ -> R.

Hence, {RegimentCode, VehicleID} is Primary Key.

12) Weapon

WeaponID->{Wname, Wtype}

Since all the fields depend on WeaponID, (WeaponID)$^+$ -> R.

Hence, WeaponID is Primary Key.

13) Vehicle

VehicleID->{Vname, Vtype, FuelType, ManYear}

{Vname, Vtype} -> {FuelType, ManYear}

Since all the fields depend on VehicleID, (VehicleID)$^+$ -> R.

Hence, VehicleID is Primary Key.

14) Equipment

EquipmentID -> {Ename, Etype}

Since all the fields depend on EquipmentID, (EquipmentID)$^+$ -> R.

Hence, EquipmentID is Primary Key.

15) Operations

OperationCode->{Oname, StartDate, EndDate,Outcome}

Since all the fields depend on OperationCode, (OperationCode)$^+$ -> R.

Hence, OperationCode is Primary Key.

Normalisation-

1) Soldier

Primary key: SoldierID

All attributes depend on the SoldierID, hence the table is 2NF.

All attributes depend directly on SoldierID, hence the table is in 3NF.

All determinants(SoldierID) are candidate keys, hence the table is in BCNF.

2) **Regiment**
   Primary key: RegimentCode
   All attributes depend on the SoldierID, hence the table is 2NF.
   All attributes depend directly on SoldierID, hence the table is in 3NF.
   All determinants(SoldierID) are candidate keys, hence the table is in BCNF.
3) **Location**
   Primary key: District
   All attributes depend on the District, hence the table is 2NF.
   All attributes depend directly on District, hence the table is in 3NF.
   All determinants(District) are candidate keys, hence the table is in BCNF.z
4) **Family**
   Primary key: {FatherName, SoldierID}
   All attributes depend on the {FatherName, SoldierID}, hence the table is 2NF.
   All attributes depend directly on {FatherName, SoldierID}, hence the table is in 3NF.
   All determinants({FatherName, SoldierID}) are candidate keys, hence the table is in BCNF.
5) **Posting**
   Primary key: {SoldierID, District}
   All attributes depend on the {SoldierID, District}, hence the table is 2NF.
   All attributes depend directly on {SoldierID, District}, hence the table is in 3NF.
   All determinants({SoldierID, District}) are candidate keys, hence the table is in BCNF.

6) **Medals**
   Primary key: MedalID
   All attributes depend on the MedalID, hence the table is 2NF.
   All attributes depend directly on MedalID, hence the table is in 3NF.
   All determinants(MedalID) are candidate keys, hence the table is in BCNF.
7) **Salary**
   Primary key: sRank
   All attributes depend on the sRank, hence the table is 2NF.
   All attributes depend directly on sRank, hence the table is in 3NF.
   All determinants(sRank) are candidate keys, hence the table is in BCNF.
8) **Weapons inventory**
   Primary key: {RegimentCode, WeaponID}
   All attributes depend on the {RegimentCode, WeaponID}, hence the table is 2NF.
   All attributes depend directly on {RegimentCode, WeaponID}, hence the table is in 3NF.
   All determinants{RegimentCode, WeaponID} are candidate keys, hence the table is in BCNF.
9) **Vehicle Inventory**
   Primary key: {RegimentCode, VehicleID}
   All attributes depend on the {RegimentCode, VehicleID}, hence the table is 2NF.
   All attributes depend directly on {RegimentCode, VehicleID}, hence the table is in 3NF.

All determinants{RegimentCode, VehicleID} are candidate keys, hence the table is in BCNF.

10) **Equipment inventory**

Primary key: {RegimentCode, EquipmentID}

All attributes depend on the {RegimentCode, EquipmentID}, hence the table is 2NF.

All attributes depend directly on {RegimentCode, EquipmentID }, hence the table is in 3NF.

All determinants{RegimentCode, EquipmentID } are candidate keys, hence the table is in BCNF.

11) **Weapon**

Primary key: WeaponID

All attributes depend on the WeaponID, hence the table is 2NF.

All attributes depend directly on WeaponID, hence the table is in 3NF.

All determinants (WeaponID) are candidate keys, hence the table is in BCNF.

12) **Vehicle**

Primary key: VehicleID

All attributes depend on the VehicleID, hence the table is 2NF.

All attributes depend directly on VehicleID, hence the table is in 3NF.

All determinants (VehicleID) are candidate keys, hence the table is in BCNF.

13) **Equipment**

Primary key: EquipmentID

All attributes depend on the EquipmentID, hence the table is 2NF.

All attributes depend directly on EquipmentID, hence the table is in 3NF.

All determinants (EquipmentID) are candidate keys, hence the table is in BCNF.

14) **Operations**

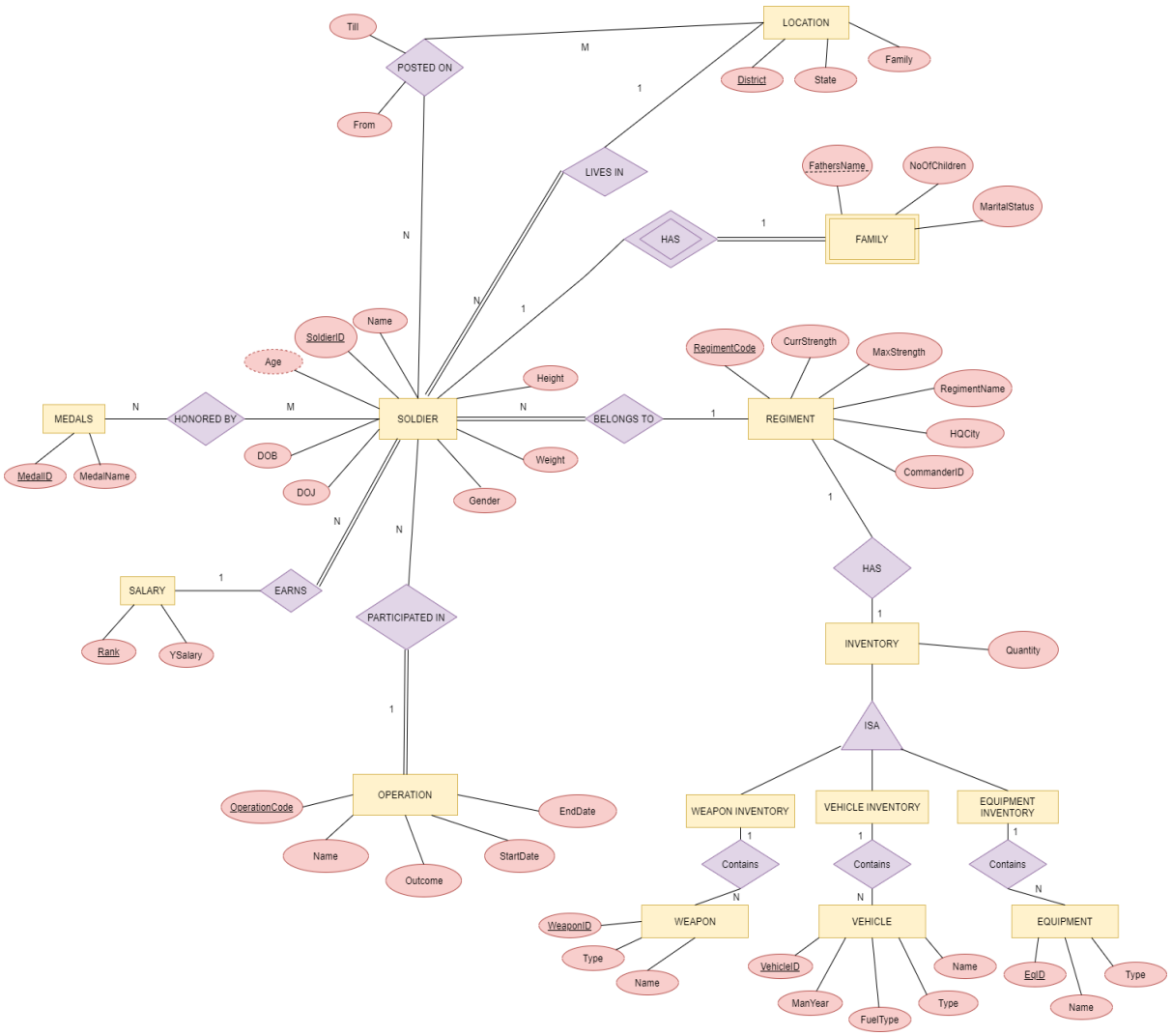
Primary key: OperationCode

All attributes depend on the OperationCode, hence the table is 2NF.

All attributes depend directly on OperationCode, hence the table is in 3NF.

All determinants (OperationCode) are candidate keys, hence the table is in BCNF.

ER Diagram :-


Till
POSTED ON
From
LOCATION
District
State
Family
M
1
LIVES IN
N
N
1
FathersName
NoOfChildren
MaritalStatus
HAS
1
FAMILY
SoldierID
Name
Age
Height
MEDALS
N
HONORED BY
M
SOLDIER
N
BELONGS TO
1
REGIMENT
RegimentCode
CurrStrength
MaxStrength
RegimentName
HQCity
CommanderID
MedalID
MedalName
DOB
DOJ
Weight
Gender
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1
HAS
SALARY
1
EARNS
PARTICIPATED IN
Rank
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INVENTORY
Quantity
ISA
OperationCode
OPERATION
EndDate
Name
Outcome
StartDate
WEAPON INVENTORY
VEHICLE INVENTORY
EQUIPMENT INVENTORY
1
1
1
Contains
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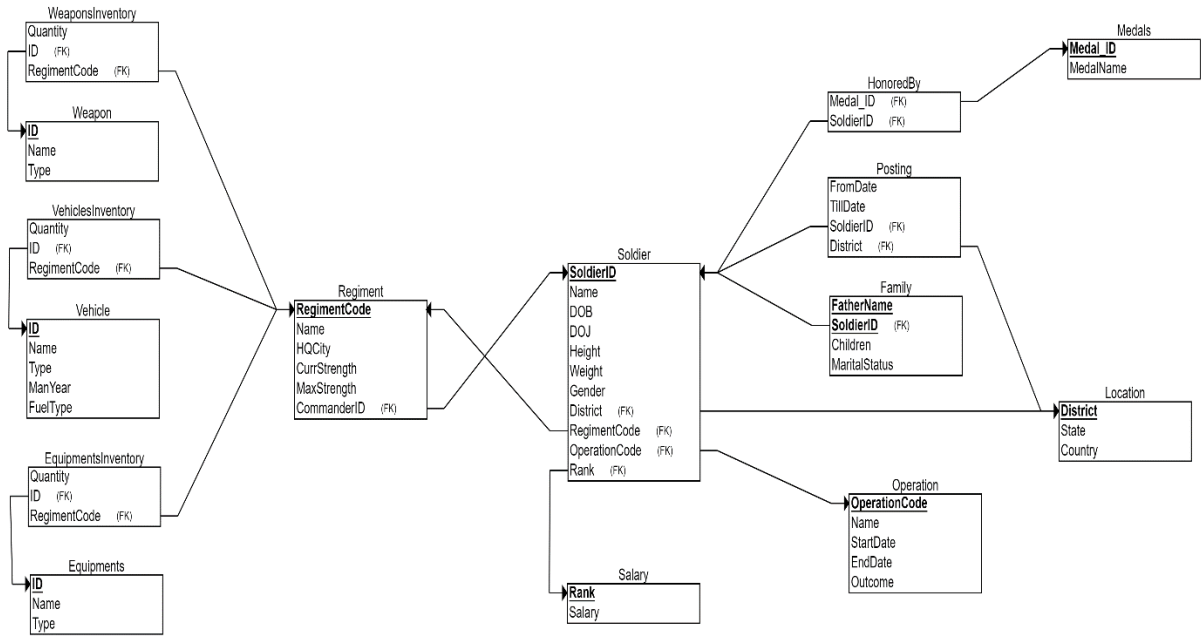
Contains
N
N
N
WeaponID
WEAPON
VEHICLE
EQUIPMENT
Type
Name
VehicleID
Name
ManYear
FuelType
Type
EqID
Type
Name

Relational Schema with Normalised Tables :-



SQL Code:

```
create table regiment (
                    regimentcode varchar(20) Primary key,
                    rname varchar(20) not null,
                hqcity varchar(20) not null,
                currstrength int not null,
                maxstrength int not null,
                commanderid varchar(20) not null
                );

create table location (
                    district varchar(20) primary key,
                state varchar(20) not null,
```

```
        country varchar(20) not null
        );

create table salary(
            sRank varchar(20) Primary key,
          salary INT not null
            );

create table operation (
                operationcode varchar(20) primary key,
          oname varchar(20) not null,
          startdate date not null,
          enddate date not null,
          outcome varchar(20) not null
          );

create table soldier (
              soldierid varchar(20) Primary key,
              sname varchar(20) not null,
         dob date not null,
         doj date not null,
         height int not null,
         weight int not null,
         gender char not null,
         district varchar(20) not null,
         regimentcode varchar(20),
         operationcode varchar(20),
         srank varchar(20) not null,
```

```
                foreign key(district) references location(district),
                foreign key (regimentcode) references regiment(regimentcode),
                foreign key (operationcode) references operation(operationcode),
                foreign key (srank) references salary(srank)
                );

create table weapon (
                        weaponid varchar(20) Primary key,
                wname varchar(20) not null,
                wtype varchar(20) not null
                );

create table vehicle (
                        vehicleid varchar(20) Primary key,
                vname varchar(20) not null,
                vtype varchar(20) not null,
                fueltype varchar(20) not null,
                manyear int not null
                );

create table equipment (
                        equipmentid varchar(20) Primary key,
                ename varchar(20) not null,
                etype varchar(20) not null
                );
```

```
create table weaponsinventory (
                quantity int not null,
        regimentcode varchar(20) not null,
        weaponid varchar(20) not null,
        foreign key (regimentcode) references regiment (regimentcode),
        foreign key (weaponid) references weapon(weaponid)
                );

create table vehiclesinventory (
                quantity int not null,
        regimentcode varchar(20) not null,
        vehicleid varchar(20) not null,
                foreign key (regimentcode) references regiment
(regimentcode),
        foreign key (vehicleid) references vehicle(vehicleid)
                );

create table equipmentsinventory (
                quantity int not null,
        regimentcode varchar(20) not null,
        equipmentid varchar(20) not null,
           foreign key (regimentcode) references regiment (regimentcode),
        foreign key (equipmentid) references equipment(equipmentid)
                );

create table medals (
              medalid varchar(20) primary key,
                medalname varchar(20) not null,
```

```
        prize INT not null
        );

create table honors (
                medalid varchar(20) not null,
            soldierid varchar(20) not null,
                foreign key (medalid) references medals(medalid),
            foreign key (soldierid) references soldier (soldierid)
            );

create table posting (
                pfrom date not null,
                ptill date not null,
            soldierid varchar(20) not null,
            district varchar(20) not null,
            foreign key(soldierid) references soldier(soldierid),
            foreign key(district) references location(district)
                );

create table family (
                fathername varchar(20) not null,
            soldierid varchar(20) not null,
            children int not null,
            maritalstatus char not null,
            foreign key (soldierid) references soldier (soldierid),
            primary key(soldierid, fathername)
            );
```

```
INSERT INTO regiment VALUES ("R01" , "Kumaon Regiment" , "Ranikhet" , 57 , 85 , "S12");

INSERT INTO regiment VALUES ("R02" , "Rajput Regiment" , "Fatehgarh" , 61 , 100 , "S05");

INSERT INTO regiment VALUES ("R03" , "Sikh Regiment" , "Ramgarh" , 75 , 120 , "S10");

INSERT INTO regiment VALUES ("R04" , "Jat Regiment" , "Bareilly" , 51 , 95 , "S18");



INSERT INTO operation VALUES ("O01","Operation Sahyog",'2018-09-24','2018-11-17',"Successful");

INSERT INTO operation VALUES ("O02","Operation Calm Down",'2016-05-11','2016-08-02',"Successful");

INSERT INTO operation VALUES ("O03","Operation All Out",'2015-06-13','2015-07-22',"Unsuccessful");

INSERT INTO operation VALUES ("O04","Operation Maitri",'2015-02-02','2015-05-07',"Successful");



INSERT INTO salary VALUES("Soldier", 25000);

INSERT INTO salary VALUES("Major", 58000);

INSERT INTO salary VALUES("Captain", 47500);

INSERT INTO salary VALUES("Colonel", 65000);

INSERT INTO salary VALUES("Brigadier", 73000);

INSERT INTO salary VALUES("Lieutenant", 35000);



INSERT INTO location VALUES( "Lucknow", "Uttar Pradesh", "India");

INSERT INTO location VALUES("Bhopal", "Madhya Pradesh", "India");

INSERT INTO location VALUES("Meerut", "Uttar Pradesh", "India");
```

```
INSERT INTO location VALUES("Patna", "Bihar", "India");

INSERT INTO location VALUES("Jalandhar", "Punjab", "India");

INSERT INTO location VALUES("Almora", "Uttarakhand", "India");

INSERT INTO location VALUES("Chandigarh", "Punjab", "India");

INSERT INTO location VALUES("Tehri", "Uttarakhand", "India");

INSERT INTO location VALUES("Indore", "Madhya Pradesh", "India");

INSERT INTO location VALUES("Allahabad", "Uttar Pradesh", "India");
```

```
INSERT INTO soldier VALUES ("S01" , "Arjun Pratap" ,'1987-12-12' , '2009-03-13' , 176 , 72 , 'M' , "Bhopal" , "R02" , "O03", "Colonel");

INSERT INTO soldier VALUES ("S02" , "Saurabh Pandit" ,'1980-02-15' ,'2008-12-09' , 179 , 73 , 'M' , "Meerut" , "R02" , "O02", "Soldier");

INSERT INTO soldier VALUES ("S03" , "Shubham Verma" ,'1990-02-24' , '2011-04-15' , 182 , 76 , 'M' , "Bhopal" , "R01" , "O01", "Soldier");

INSERT INTO soldier VALUES ("S04", "Mayank Kumvat" ,'1978-06-14' ,'2011-09-21' , 163 , 69 , 'M' , "Almora" , "R03" , "O01", "Lieutenant");

INSERT INTO soldier VALUES ("S05", "Satveer Thakur" ,'1980-04-20' ,'2004-10-19' ,162, 65, 'M' , "Jalandhar" , "R02" , "O03", "Major");

INSERT INTO soldier VALUES ("S06" , "Hamid Ahmed" ,'1976-06-10' ,'2004-02-24' , 168 , 70 , 'M' , "Chandigarh" , "R01" , "O01", "Brigadier");

INSERT INTO soldier VALUES ("S07" , "Ajay Singh" ,'1984-04-12' ,'2003-07-09' , 175 , 79 , 'M' , "Chandigarh" , "R04" , "O04", "Lieutenant");

INSERT INTO soldier VALUES ("S08" , "Avantika Kulkarni" ,'1990-04-26' ,'2009-08-18' ,164 , 62 , 'F' , "Indore" , "R04" , "O02", "Soldier");

INSERT INTO soldier VALUES ("S09" , "Abhishek Saxena" ,'1975-05-12' ,'2012-05-16' , 181 , 76 , 'M' , "Tehri" , "R01" , "O01", "Brigadier");

INSERT INTO soldier VALUES ("S10" , "Rajveer Singh" ,'1969-02-15' ,'2000-03-25' , 173 , 70 , 'M' , "Allahabad" , "R03" , "O02", "Captain");

INSERT INTO soldier VALUES ("S11" , "Karan Jagtap" ,'1988-02-05' ,'2011-09-02' , 167 , 70 , 'M' , "Allahabad" , "R04" , "O03", "Captain");
```

INSERT INTO soldier VALUES ("S12" , "Vinay Kumar" ,'1972-07-07' ,'2004-04-01' , 169 , 65 , 'M' , "Meerut" , "R01" , "O04", "Colonel");

INSERT INTO soldier VALUES ("S13" , "Rajat Talesra" ,'1976-09-19' ,'2007-10-24' , 172 , 76 , 'M' , "Patna" , "R02" , "O03", "Colonel");

INSERT INTO soldier VALUES ("S14" , "Ankur Ranjan" ,'1969-10-11' ,'2001-07-22' , 169 , 64 , 'M' , "Almora" , "R03" , "O01", "Captain");

INSERT INTO soldier VALUES ("S15" , "Disha Singh" ,'1983-09-18' ,'2008-02-28' , 165 , 65 , 'F' , "Lucknow" , "R04" , "O04", "Brigadier");

INSERT INTO soldier VALUES ("S16" , "Niranjan Arya" ,'1971-12-04' ,'2010-10-21' , 171 , 69 , 'M' , "Lucknow" , "R02" , "O02", "Lieutenant");

INSERT INTO soldier VALUES ("S17" , "Dheeru Sachdev" ,'1981-01-19' ,'2015-12-31' , 168 , 66 , 'M' , "Tehri" , "R03" , "O01", "Soldier");

INSERT INTO soldier VALUES ("S18" , "Vipul Yadav" ,'1975-06-05' ,'2004-01-24' , 179 , 74 , 'M' , "Indore" , "R04" , "O03", "Major");

INSERT INTO soldier VALUES ("S19" , "Brijmohan Singh" ,'1998-11-25' ,'2014-02-12' , 173 , 65 , 'M' , "Lucknow" , "R01" , "O04", "Soldier");

INSERT INTO soldier VALUES ("S20" , "Harminder Kaur" ,'1971-12-17' ,'2015-11-25' , 165 , 62 , 'F' , "Patna" , "R02" , "O04", "Colonel");

INSERT INTO weapon VALUES ("W01", "Glock 17" , "Pistol");

INSERT INTO weapon VALUES ("W02", "SPAS 15" , "Shotgun");

INSERT INTO weapon VALUES ("W03", "Micro UZI" , "SMG");

INSERT INTO weapon VALUES ("W04", "MP5" , "SMG");

INSERT INTO weapon VALUES ("W05", "Steyr AUG" , "AR");

INSERT INTO weapon VALUES ("W06", "AKM" , "AR");

INSERT INTO weapon VALUES ("W07", "Barrett M95" , "Sniper Rifle");

INSERT INTO weapon VALUES ("W08", "M4A1 Carbine" , "AR");

INSERT INTO weapon VALUES ("W09", "Steyr SSG" , "Sniper Rifle");

INSERT INTO weapon VALUES ("W10", "M249" , "Machine Gun");

```
INSERT INTO vehicle VALUES("V01","Force Gurkha","Ligh Utility","Petrol",2001);
INSERT INTO vehicle VALUES("V02","AL Stallion","Carrier","Diesel",2008);
INSERT INTO vehicle VALUES("V03","Sisu Nasu","All Terrain","Diesel",1999);
INSERT INTO vehicle VALUES("V04","Isuzu F","Carrier","Diesel",2007);
INSERT INTO vehicle VALUES("V05","Arjun MBT","Battle Tank","Petrol",1990);
INSERT INTO vehicle VALUES("V06","Ajeya","Battle Tank","Diesel",1996);
INSERT INTO vehicle VALUES("V07","Sarath","Infantry combat","Diesel",2011);
INSERT INTO vehicle VALUES("V08","Mazda R1","Light Utility","Petrol",2009);
```

```
INSERT INTO equipment VALUES("E01","MKU Helmet","Protective gear");
INSERT INTO equipment VALUES("E02","Kevlar Vest","Protective gear");
INSERT INTO equipment VALUES("E03","Nigh Vision Goggle","Utility");
INSERT INTO equipment VALUES("E04","HE Grenade","Utility");
INSERT INTO equipment VALUES("E05","Health Pack","Medicine");
INSERT INTO equipment VALUES("E06","First Aid Kit","Medicine");
```

```
INSERT INTO weaponsinventory VALUES (12 ,"R01","W01");
INSERT INTO weaponsinventory VALUES (8 ,"R01","W02");
INSERT INTO weaponsinventory VALUES (6 ,"R01","W03");
INSERT INTO weaponsinventory VALUES (8 ,"R01","W04");
INSERT INTO weaponsinventory VALUES (7 ,"R01","W05");
```

```
INSERT INTO weaponsinventory VALUES (5 ,"R01","W06");
INSERT INTO weaponsinventory VALUES (4 ,"R01","W07");
INSERT INTO weaponsinventory VALUES (3 ,"R01","W08");
INSERT INTO weaponsinventory VALUES (8 ,"R01","W09");
INSERT INTO weaponsinventory VALUES (4 ,"R01","W10");

INSERT INTO weaponsinventory VALUES (15 ,"R02","W01");
INSERT INTO weaponsinventory VALUES (10 ,"R02","W02");
INSERT INTO weaponsinventory VALUES (5 ,"R02","W03");
INSERT INTO weaponsinventory VALUES (8,"R02","W04");
INSERT INTO weaponsinventory VALUES (6,"R02","W05");
INSERT INTO weaponsinventory VALUES (4,"R02","W06");
INSERT INTO weaponsinventory VALUES (6,"R02","W07");
INSERT INTO weaponsinventory VALUES (8,"R02","W08");
INSERT INTO weaponsinventory VALUES (4,"R02","W09");
INSERT INTO weaponsinventory VALUES (3,"R02","W10");

INSERT INTO weaponsinventory VALUES (20 ,"R03","W01");
INSERT INTO weaponsinventory VALUES (10 ,"R03","W02");
INSERT INTO weaponsinventory VALUES (9 ,"R03","W03");
INSERT INTO weaponsinventory VALUES (5,"R03","W04");
INSERT INTO weaponsinventory VALUES (6,"R03","W05");
INSERT INTO weaponsinventory VALUES (7,"R03","W06");
INSERT INTO weaponsinventory VALUES (8,"R03","W07");
INSERT INTO weaponsinventory VALUES (10,"R03","W08");
INSERT INTO weaponsinventory VALUES (4,"R03","W09");
INSERT INTO weaponsinventory VALUES (5,"R03","W10");
```

```
INSERT INTO weaponsinventory VALUES (16 ,"R04","W01");
INSERT INTO weaponsinventory VALUES (8 ,"R04","W02");
INSERT INTO weaponsinventory VALUES (10 ,"R04","W03");
INSERT INTO weaponsinventory VALUES (8,"R04","W04");
INSERT INTO weaponsinventory VALUES (6,"R04","W05");
INSERT INTO weaponsinventory VALUES (6,"R04","W06");
INSERT INTO weaponsinventory VALUES (8,"R04","W07");
INSERT INTO weaponsinventory VALUES (4,"R04","W08");
INSERT INTO weaponsinventory VALUES (8,"R04","W09");
INSERT INTO weaponsinventory VALUES (5,"R04","W10");



INSERT INTO vehiclesinventory VALUES (5,"R01","V01");
INSERT INTO vehiclesinventory VALUES (2,"R01","V03");
INSERT INTO vehiclesinventory VALUES (8,"R01","V04");
INSERT INTO vehiclesinventory VALUES (3,"R01","V05");

INSERT INTO vehiclesinventory VALUES (3,"R02","V01");
INSERT INTO vehiclesinventory VALUES (6,"R02","V08");
INSERT INTO vehiclesinventory VALUES (4,"R02","V02");
INSERT INTO vehiclesinventory VALUES (8,"R02","V06");

INSERT INTO vehiclesinventory VALUES (2,"R03","V02");
INSERT INTO vehiclesinventory VALUES (6,"R03","V03");
INSERT INTO vehiclesinventory VALUES (8,"R03","V04");
INSERT INTO vehiclesinventory VALUES (4,"R03","V06");
```

```
INSERT INTO vehiclesinventory VALUES (3,"R04","V08");
INSERT INTO vehiclesinventory VALUES (7,"R04","V04");
INSERT INTO vehiclesinventory VALUES (6,"R04","V06");
INSERT INTO vehiclesinventory VALUES (2,"R04","V03");


INSERT INTO equipmentsinventory VALUES (54,"R01","E01");
INSERT INTO equipmentsinventory VALUES (37,"R01","E02");
INSERT INTO equipmentsinventory VALUES (46,"R01","E03");
INSERT INTO equipmentsinventory VALUES (42,"R01","E04");
INSERT INTO equipmentsinventory VALUES (40,"R01","E05");
INSERT INTO equipmentsinventory VALUES (42,"R01","E06");

INSERT INTO equipmentsinventory VALUES (44,"R02","E01");
INSERT INTO equipmentsinventory VALUES (57,"R02","E02");
INSERT INTO equipmentsinventory VALUES (56,"R02","E03");
INSERT INTO equipmentsinventory VALUES (62,"R02","E04");
INSERT INTO equipmentsinventory VALUES (40,"R02","E05");
INSERT INTO equipmentsinventory VALUES (72,"R02","E06");

INSERT INTO equipmentsinventory VALUES (44,"R03","E01");
INSERT INTO equipmentsinventory VALUES (32,"R03","E02");
INSERT INTO equipmentsinventory VALUES (39,"R03","E03");
INSERT INTO equipmentsinventory VALUES (60,"R03","E04");
INSERT INTO equipmentsinventory VALUES (45,"R03","E05");
INSERT INTO equipmentsinventory VALUES (35,"R03","E06");

INSERT INTO equipmentsinventory VALUES (50,"R04","E01");
```

```
INSERT INTO equipmentsinventory VALUES (30,"R04","E02");
INSERT INTO equipmentsinventory VALUES (25,"R04","E03");
INSERT INTO equipmentsinventory VALUES (58,"R04","E04");
INSERT INTO equipmentsinventory VALUES (27,"R04","E05");
INSERT INTO equipmentsinventory VALUES (38,"R04","E06");


INSERT INTO medals VALUES ("M01","Param Vir Chakra", 75000);
INSERT INTO medals VALUES ("M02","Ashok Chakra",65000);
INSERT INTO medals VALUES ("M03","Kirti Chakra",50000);
INSERT INTO medals VALUES ("M04","Sarvottam Seva Medal",42500);
INSERT INTO medals VALUES ("M05","Uttam Seva Medal",35550);
INSERT INTO medals VALUES ("M06","Sena Medal",15000);


INSERT INTO honors VALUES ("M03","S04");
INSERT INTO honors VALUES ("M06","S10");
INSERT INTO honors VALUES ("M01","S01");
INSERT INTO honors VALUES ("M02","S12");
INSERT INTO honors VALUES ("M03","S05");
INSERT INTO honors VALUES ("M01","S10");
INSERT INTO honors VALUES ("M03","S18");
INSERT INTO honors VALUES ("M02","S19");
INSERT INTO honors VALUES ("M05","S10");
INSERT INTO honors VALUES ("M04","S18");
INSERT INTO honors VALUES ("M01","S18");
INSERT INTO honors VALUES ("M06","S01");
INSERT INTO honors VALUES ("M02","S03");
```

```
INSERT INTO honors VALUES ("M05","S05");
INSERT INTO honors VALUES ("M01","S07");
INSERT INTO honors VALUES ("M04","S08");
INSERT INTO honors VALUES ("M02","S09");
INSERT INTO honors VALUES ("M04","S20");
INSERT INTO honors VALUES ("M06","S16");
INSERT INTO honors VALUES ("M05","S04");
INSERT INTO honors VALUES ("M06","S03");
INSERT INTO honors VALUES ("M02","S15");
INSERT INTO honors VALUES ("M03","S03");
```

```
INSERT INTO posting VALUES ('2017-10-23','2020-10-22',"S01","Lucknow");
INSERT INTO posting VALUES ('2015-09-13','2020-10-24',"S02","Almora");
INSERT INTO posting VALUES ('2016-07-02','2020-08-10',"S03","Tehri");
INSERT INTO posting VALUES ('2017-11-11','2020-11-12',"S04","Meerut");
INSERT INTO posting VALUES ('2015-10-07','2020-11-09',"S05","Patna");
INSERT INTO posting VALUES ('2018-12-18','2020-12-26',"S06","Meerut");
INSERT INTO posting VALUES ('2016-06-12','2020-07-15',"S07","Allahabad");
INSERT INTO posting VALUES ('2015-10-13','2020-11-20',"S08","Patna");
INSERT INTO posting VALUES ('2017-12-20','2020-09-29',"S08","Lucknow");
INSERT INTO posting VALUES ('2015-11-09','2020-06-06',"S09","Lucknow");
INSERT INTO posting VALUES ('2018-01-01','2020-09-07',"S10","Tehri");
INSERT INTO posting VALUES ('2018-10-02','2020-09-15',"S10","Jalandhar");
INSERT INTO posting VALUES ('2016-02-08','2020-07-12',"S11","Chandigarh");
INSERT INTO posting VALUES ('2017-05-16','2020-11-09',"S12","Bhopal");
INSERT INTO posting VALUES ('2015-12-01','2020-05-19',"S12","Allahabad");
INSERT INTO posting VALUES ('2018-04-28','2020-10-17',"S13","Jalandhar");
```

```
INSERT INTO posting VALUES ('2016-12-12','2020-06-19',"S14","Lucknow");
INSERT INTO posting VALUES ('2017-07-19','2020-05-18',"S15","Bhopal");
INSERT INTO posting VALUES ('2018-06-21','2020-08-08',"S15","Almora");
INSERT INTO posting VALUES ('2016-07-16','2020-02-12',"S16","Chandigarh");
INSERT INTO posting VALUES ('2017-03-21','2020-04-12',"S16","Tehri");
INSERT INTO posting VALUES ('2015-05-11','2020-06-04',"S16","Lucknow");
INSERT INTO posting VALUES ('2018-10-24','2020-06-15',"S17","Meerut");
INSERT INTO posting VALUES ('2017-08-16','2020-11-11',"S18","Almora");
INSERT INTO posting VALUES ('2015-04-21','2020-07-15',"S19","Allahabad");
INSERT INTO posting VALUES ('2016-01-16','2020-11-13',"S20","Lucknow");


INSERT INTO family VALUES ("Kuwar Pratap","S01",1,'Y');
INSERT INTO family VALUES ("Ashok Pandit","S02",0,'N');
INSERT INTO family VALUES ("Rajeev Verma","S03",0,'Y');
INSERT INTO family VALUES ("Manas Kumvat","S04",0,'N');
INSERT INTO family VALUES ("Nilesh Thakur","S05",0,'Y');
INSERT INTO family VALUES ("Ajaz Ahmed","S06",0,'N');
INSERT INTO family VALUES ("Shantanu Singh","S07",2,'Y');
INSERT INTO family VALUES ("Mahesh Kulkarni","S08",2,'Y');
INSERT INTO family VALUES ("Prateek Saxena","S09",2,'Y');
INSERT INTO family VALUES ("Aman Singh","S10",3,'Y');
INSERT INTO family VALUES ("Arjun Jagtap","S11",1,'Y');
INSERT INTO family VALUES ("Vijay Kumar","S12",0,'N');
INSERT INTO family VALUES ("Naman Talesra","S13",0,'Y');
INSERT INTO family VALUES ("Aditya Ranjan","S14",1,'Y');
INSERT INTO family VALUES ("Akbar Singh","S15",3,'Y');
INSERT INTO family VALUES ("Dhirendra Arya","S16",0,'N');
```

```
INSERT INTO family VALUES ("Harshvardhan Sachdev","S17",2,'Y');
INSERT INTO family VALUES ("Umesh Yadav","S18",1,'Y');
INSERT INTO family VALUES ("Balkishore Singh","S19",1,'Y');
INSERT INTO family VALUES ("Jaspreet Kaur","S20",2,'Y');
```