

Plasma Bank Management

Search, Update & Delete Queries:

-- All Donor Information With His Medical History:

```
select * from donor join donor_medical_history
where Donor_Id = His_Id;
```

-- All Patient Information:

```
select * from plasma_receiver;
```

-- Blood Bank Information:

```
select * from blood_bank;
```

-- Hospital List:

```
select distinct(Hospital_Name), Address, Contact_No
from hospital;
```

-- Which Patient Is From Which Hospital & Their Blood Group and Plasma Id:

```
select p.Patient_Name, h.Hospital_Name, h.Address, p.Blood_Group, h.Plasma_Id
from hospital as h join plasma_receiver as p
where p.Patient_Id = h.Patient_Id;
```

-- Donor Name, Address, Blood Group & Covid-19 Recovery Date:

```
select d.Donor_Name, d.Address, d.Blood_Group, m.Covid19_Recovery_Date
from donor as d join donor_medical_history as m
where d.Donor_Id = m.His_Id;
```

-- Patient Name Associative With Their Required Plasma Group:

```
select Patient_Name, Blood_Group, Address, Phone_Number  
from plasma_receiver;
```

-- Available Donor's Number For Different Blood Group:

```
select Blood_Group, count(Blood_Group) as "Available Donors"  
from donor  
group by Blood_Group;
```

-- Available Donors From Distinct Address

```
select Address, count(Address) as "Donor's Number"  
from donor  
group by Address;
```

-- Updating Donor's Wrong Information:

-- Suppose Muminul Islam Is From Mymensingh But IT Person Listed Him That He Is From Sylhet. So He Has To Update It.

```
UPDATE donor  
SET Address = "Mymensingh"  
WHERE Donor_Id = '5';
```

-- So, Here is the Updated Donor List:

```
select * from donor;
```

-- Updating Patient's Wrong Information:

-- Suppose Forhad Alam's Blood Group Is "B-" But IT Person Inserted The Wrong Information. So He Has To Update It.

```
UPDATE plasma_receiver  
SET Blood_Group = "B-"  
WHERE Patient_Id = '4';
```

-- Find Any Patient Who's Name Contains "Islam":

```
select * from plasma_receiver
```

```
WHERE Patient_Name LIKE '%Islam%';
```

-- Joining Patient With Hospital:

```
select p.Patient_Name, p.Address, h.Hospital_Name
```

```
from plasma_receiver as p Join hospital as h
```

```
where h.Patient_Id = p.Patient_Id;
```

-- Finding Donor's Information Using Subqueries:

```
select Donor_Name, Address, Contact_No, Blood_Group
```

```
from donor
```

```
where Blood_Group = (select Blood_Group
```

```
from donor
```

```
where Donor_Id = "5");
```

-- Adding A Column In A Table

```
ALTER TABLE plasma_receiver
```

```
ADD (Medical_History VARCHAR(50));
```

-- Deleting Information From Table:

```
DELETE FROM blood_bank
```

```
WHERE Donor_Id = '10';
```

Queries For Table Creation & Insert Data Into The Table:

-- Schema plasma_bank_management_system

```
CREATE SCHEMA IF NOT EXISTS `plasma_bank_management_system` DEFAULT  
CHARACTER SET utf8mb4 COLLATE utf8mb4_0900_ai_ci ;
```

```
USE `plasma_bank_management_system` ;
```

```
-- -----  
-- Table `plasma_bank_management_system`.`donor`  
-- -----
```

```
CREATE TABLE IF NOT EXISTS `plasma_bank_management_system`.`donor` (  
  `Donor_Name` VARCHAR(25) NOT NULL,  
  `Address` VARCHAR(25) NOT NULL,  
  `Contact_No` VARCHAR(15) NOT NULL,  
  `Date_of_Birth` DATE NULL,  
  `Blood_Group` VARCHAR(5) NOT NULL,  
  `Donor_Id` INT NOT NULL,  
  PRIMARY KEY (`Donor_Id`));
```

```
INSERT INTO DONOR VALUES("Hafsa Tajrin", "Dhaka", "01841188024",  
STR_TO_DATE('1984-03-12','%Y-%m-%d'), "B+", 001);
```

```
INSERT INTO DONOR VALUES("Abdur Rahim", "Dhaka", "01617775300",  
STR_TO_DATE('1987-04-28','%Y-%m-%d'), "A+", 002);
```

```
INSERT INTO DONOR VALUES("Maruf Billah", "Khulna", "01993287224",  
STR_TO_DATE('1989-08-07','%Y-%m-%d'), "O+", 003);
```

```
INSERT INTO DONOR VALUES("AKM Niloy", "Mymensingh", "01721084016",  
STR_TO_DATE('1975-05-30','%Y-%m-%d'), "B+", 004);
```

```
INSERT INTO DONOR VALUES("Muminul Fahim", "Sylhet", "01733700709",  
STR_TO_DATE('1996-01-22','%Y-%m-%d'), "O+", 005);
```

```
INSERT INTO DONOR VALUES("Rony Islam", "Rajshahi", "01749964017",  
STR_TO_DATE('1979-06-29','%Y-%m-%d'), "B+", 006);
```

```
INSERT INTO DONOR VALUES("Junayed Asif", "Rangpur", "01774343394",  
STR_TO_DATE('1988-10-06','%Y-%m-%d'), "AB+", 007);
```

```
INSERT INTO DONOR VALUES("Badshah Miah", "Sylhet", "01791805513",  
STR_TO_DATE('1986-09-21','%Y-%m-%d'), "AB+", 008);
```

```
INSERT INTO DONOR VALUES("Joy Saha", "Mymensingh", "01812744330",  
STR_TO_DATE('1995-11-27','%Y-%m-%d'), "B+", 009);
```

```
INSERT INTO DONOR VALUES("Tasnuva Tabassum", "Dhaka", "01743039013",  
STR_TO_DATE('1992-02-11','%Y-%m-%d'), "B+", 010);
```

```
INSERT INTO DONOR VALUES("Maruf Hasan", "Sylhet", "01893918383",  
STR_TO_DATE('1988-08-09','%Y-%m-%d'), "AB+", 011);
```

```
INSERT INTO DONOR VALUES("Piyal Hasan", "Chittagong", "01812376168",  
STR_TO_DATE('1990-02-26','%Y-%m-%d'), "A+", 012);
```

```
-- -----
```

```
-- Table `plasma_bank_management_system`.`plasma_receiver`
```

```
-- -----
```

```
CREATE TABLE IF NOT EXISTS `plasma_bank_management_system`.`plasma_receiver` (  
  `Patient_Name` VARCHAR(25) NOT NULL,  
  `Patient_Id` INT NOT NULL,  
  `Phone_Number` VARCHAR(15) NOT NULL,  
  `Address` VARCHAR(25) NOT NULL,  
  `Blood_Group` VARCHAR(5) NULL DEFAULT NULL,  
  PRIMARY KEY (`Patient_Id`));
```

```
INSERT INTO PLASMA_RECEIVER VALUES("Nurul Hasan", "001", "01718345131",  
"Chittagong", "A+");
```

```
INSERT INTO PLASMA_RECEIVER VALUES("Sifat Islam", "002", "01771080595",  
"Dhaka", "B+");
```

```
INSERT INTO PLASMA_RECEIVER VALUES("Farhin Alam", "003", "01799970987",  
"Mymensingh", "B+");
```

```
INSERT INTO PLASMA_RECEIVER VALUES("Forhad Alam", "004", "01730191834",  
"Mymensingh", "B+");
```

```
INSERT INTO PLASMA_RECEIVER VALUES("Mominul Haque", "005", "01749341075",  
"Sylhet", "O+");
```

```
INSERT INTO PLASMA_RECEIVER VALUES("Nasima Akter", "006", "01783434345",  
"Dhaka", "A+");
```

```
INSERT INTO PLASMA_RECEIVER VALUES("Feroj Ahmed", "007", "01759210080",  
"Sylhet", "AB+");
```

```
INSERT INTO PLASMA_RECEIVER VALUES("Rakibul Islam", "008", "01622011981",  
"Sylhet", "AB+");
```

```
INSERT INTO PLASMA_RECEIVER VALUES("Manik Hasan", "009", "01964395761",  
"Dhaka", "B+");
```

```
INSERT INTO PLASMA_RECEIVER VALUES("Saiful Islam", "010", "01521249751",  
"Rangpur", "AB+");
```

```
INSERT INTO PLASMA_RECEIVER VALUES("Anirban Sarker", "011", "01990272384",  
"Khulna", "O+");
```

```
INSERT INTO PLASMA_RECEIVER VALUES("Nur Alam", "012", "01927932117",  
"Rajshahi", "B+");
```

```
--  
-- Table `plasma_bank_management_system`.`hospital`  
--
```

```
CREATE TABLE IF NOT EXISTS `plasma_bank_management_system`.`hospital` (  
  `Hospital_Name` VARCHAR(35) NOT NULL,  
  `Address` VARCHAR(35) NOT NULL,  
  `Contact_No` VARCHAR(15) NOT NULL,  
  `Plasma_Id` VARCHAR(10) NOT NULL,  
  `Patient_Id` INT NOT NULL,  
  PRIMARY KEY (`Plasma_Id`),  
  INDEX `Patient_Id_idx` (`Patient_Id` ASC) VISIBLE,  
  CONSTRAINT `Patient_Id`  
    FOREIGN KEY (`Patient_Id`)  
    REFERENCES `plasma_bank_management_system`.`plasma_receiver` (`Patient_Id`)  
    ON DELETE NO ACTION  
    ON UPDATE NO ACTION);
```

```

INSERT INTO HOSPITAL VALUES("DMCH", "Dhaka", "01983121331", "B+_01", 002);
INSERT INTO HOSPITAL VALUES("DMCH", "Dhaka", "01983121331", "A+_02", 006);
INSERT INTO HOSPITAL VALUES("KMCH", "Khulna", "041-760350", "O+_01", 011);
INSERT INTO HOSPITAL VALUES("MMCH", "Mymensingh", "091-66063", "B+_01M",
003);
INSERT INTO HOSPITAL VALUES("SMCH", "Sylhet", "0821-713667", "O+_01S", 005);
INSERT INTO HOSPITAL VALUES("RMCH", "Rajshahi", "0721-772150", "B+_01R", 012);
INSERT INTO HOSPITAL VALUES("RNMCH", "Rangpur", "0521-53881", "AB+_01RN",
010);
INSERT INTO HOSPITAL VALUES("SMCH", "Sylhet", "0821-713667", "AB+_01S", 007);
INSERT INTO HOSPITAL VALUES("MMCH", "Mymensingh", "091-66063", "B+_02M",
004);
INSERT INTO HOSPITAL VALUES("DMCH", "Dhaka", "01983121331", "B+_02", 009);
INSERT INTO HOSPITAL VALUES("SMCH", "Sylhet", "0821-713667", "AB+_02S", 008);
INSERT INTO HOSPITAL VALUES("CMCH", "Chittagong", "031-630335", "A+_01C", 001);

```

```

-- -----

```

```

-- Table `plasma_bank_management_system`.`plasmapheresis`

```

```

-- -----

```

```

CREATE TABLE IF NOT EXISTS `plasma_bank_management_system`.`plasmapheresis` (
  `Plasmapheresis_Id` INT(10) NOT NULL,
  `Separated_Units` INT NOT NULL,
  `Blood_Group` VARCHAR(5) NOT NULL,
  PRIMARY KEY (`Plasmapheresis_Id`));

```

```

INSERT INTO PLASMAPHERESIS VALUES(001, 2, "B+");
INSERT INTO PLASMAPHERESIS VALUES(002, 1, "A+");
INSERT INTO PLASMAPHERESIS VALUES(003, 1, "O+");
INSERT INTO PLASMAPHERESIS VALUES(004, 2, "B+");

```

```

INSERT INTO PLASMAPHERESIS VALUES(005, 2, "O+");
INSERT INTO PLASMAPHERESIS VALUES(006, 1, "B+");
INSERT INTO PLASMAPHERESIS VALUES(007, 2, "AB+");
INSERT INTO PLASMAPHERESIS VALUES(008, 1, "AB+");
INSERT INTO PLASMAPHERESIS VALUES(009, 1, "B+");
INSERT INTO PLASMAPHERESIS VALUES(010, 2, "B+");
INSERT INTO PLASMAPHERESIS VALUES(011, 2, "AB+");
INSERT INTO PLASMAPHERESIS VALUES(012, 1, "A+");

```

```

-----
-- Table `plasma_bank_management_system`.`blood_bank`
-----

CREATE TABLE IF NOT EXISTS `plasma_bank_management_system`.`blood_bank` (
  `Bank_Name` VARCHAR(25) NOT NULL,
  `Location` VARCHAR(25) NOT NULL,
  `Blood_Number_Units` INT NOT NULL,
  `Contact_No` VARCHAR(15) NOT NULL,
  `Donor_Id` INT NOT NULL,
  `Bank_Id` VARCHAR(10) NOT NULL,
  `Plasmapheresis_Id` INT NOT NULL,
  `Dnum_In_BB` VARCHAR(10) NOT NULL,
  INDEX `Donor_Id_idx` (`Donor_Id` ASC) VISIBLE,
  INDEX `Bank_Id_idx` (`Bank_Id` ASC) VISIBLE,
  INDEX `Plasmapheresis_Id_idx` (`Plasmapheresis_Id` ASC) VISIBLE,
  PRIMARY KEY (`Dnum_In_BB`),
  CONSTRAINT `Donor_Id`
    FOREIGN KEY (`Donor_Id`)
    REFERENCES `plasma_bank_management_system`.`donor` (`Donor_Id`)

```



```

ON DELETE NO ACTION
ON UPDATE NO ACTION,
CONSTRAINT `Bank_Id`
FOREIGN KEY (`Bank_Id`)
REFERENCES `plasma_bank_management_system`.`hospital` (`Plasma_Id`)
ON DELETE NO ACTION
ON UPDATE NO ACTION,
CONSTRAINT `Plasmapheresis_Id`
FOREIGN KEY (`Plasmapheresis_Id`)
REFERENCES `plasma_bank_management_system`.`plasmapheresis` (`Plasmapheresis_Id`)
ON DELETE NO ACTION
ON UPDATE NO ACTION);

```

```

INSERT INTO BLOOD_BANK VALUES("Dhaka Blood Bank", "Dhaka", 2, "01714010869",
001, "B+_01", 001, "DBB-01");

```

```

INSERT INTO BLOOD_BANK VALUES("Dhaka Blood Bank", "Dhaka", 1, "01714010869",
002, "A+_02", 002, "DBB-02");

```

```

INSERT INTO BLOOD_BANK VALUES("Khulna Blood Bank", "Khulna", 1, "01885455592",
003, "O+_01", 003, "KBB-01");

```

```

INSERT INTO BLOOD_BANK VALUES("Mymensingh Blood Bank", "Mymensingh", 2,
"01521443904", 004, "B+_01M", 004, "MBB-01");

```

```

INSERT INTO BLOOD_BANK VALUES("Sylhet Blood Bank", "Sylhet", 2, "01937591604",
005, "O+_01S", 005, "SBB-01");

```

```

INSERT INTO BLOOD_BANK VALUES("Rajshahi Blood Bank", "Rajshahi", 1,
"01770807108", 006, "B+_01R", 006, "RBB-01");

```

```

INSERT INTO BLOOD_BANK VALUES("Rangpur Blood Bank", "Rangpur", 2,
"01988877800", 007, "AB+_01RN", 007, "RNBB-01");

```

```

INSERT INTO BLOOD_BANK VALUES("Sylhet Blood Bank", "Sylhet", 1, "01937591604",
008, "AB+_01S", 008, "SBB-02");

```

```

INSERT INTO BLOOD_BANK VALUES("Mymensingh Blood Bank", "Mymensingh", 1,
"01521443904", 009, "B+_02M", 009, "MBB-02");

```

```
INSERT INTO BLOOD_BANK VALUES("Dhaka Blood Bank", "Dhaka", 2, "01714010869",  
010, "B+_02", 010, "DBB-03");
```

```
INSERT INTO BLOOD_BANK VALUES("Sylhet Blood Bank", "Sylhet", 2, "01937591604",  
011, "AB+_02S", 011, "SBB-03");
```

```
INSERT INTO BLOOD_BANK VALUES("Chittagong Blood Bank", "Chittagong", 1,  
"01837690914", 012, "A+_01C", 012, "CBB-01");
```

```
-----  
-- Table `plasma_bank_management_system`.`donor_medical_history`  
-----
```

```
CREATE TABLE IF NOT EXISTS  
`plasma_bank_management_system`.`donor_medical_history` (  
  `His_Id` INT NOT NULL,  
  `Donor_Age` INT NOT NULL,  
  `HB_Count` VARCHAR(10) NULL DEFAULT NULL,  
  `WBC_Count` VARCHAR(10) NULL DEFAULT NULL,  
  `RBC_Count` VARCHAR(10) NULL DEFAULT NULL,  
  `Is_Diabetic` VARCHAR(5) NULL DEFAULT NULL,  
  `Is_Alcoholic` VARCHAR(5) NULL DEFAULT NULL,  
  `Height` VARCHAR(10) NULL DEFAULT NULL,  
  `Weight` VARCHAR(10) NULL DEFAULT NULL,  
  `Covid19_Recovery_Date` DATE NOT NULL,  
  PRIMARY KEY (`Covid19_Recovery_Date`),  
  INDEX `His_Id_idx` (`His_Id` ASC) VISIBLE,  
  CONSTRAINT `His_Id`  
    FOREIGN KEY (`His_Id`)  
    REFERENCES `plasma_bank_management_system`.`donor` (`Donor_Id`)  
    ON DELETE NO ACTION  
    ON UPDATE NO ACTION);
```

INSERT INTO DONOR_MEDICAL_HISTORY VALUES(001, 36, "14.5", "7.5*10^9", "5.2",
"No", "Yes", "159cm", "72kg", STR_TO_DATE('2020-06-19','%Y-%m-%d'));

INSERT INTO DONOR_MEDICAL_HISTORY VALUES(002, 33, "13.2", "6.2*10^9", "4.8",
"No", "No", "161cm", "66kg", STR_TO_DATE('2020-08-25','%Y-%m-%d'));

INSERT INTO DONOR_MEDICAL_HISTORY VALUES(003, 31, "15.5", "9.5*10^9", "5.9",
"No", "No", "154cm", "82kg", STR_TO_DATE('2020-05-13','%Y-%m-%d'));

INSERT INTO DONOR_MEDICAL_HISTORY VALUES(004, 45, "12.5", "8.6*10^9", "6.0",
"Yes", "Yes", "172cm", "72kg", STR_TO_DATE('2020-07-15','%Y-%m-%d'));

INSERT INTO DONOR_MEDICAL_HISTORY VALUES(005, 24, "14.6", "7.8*10^9", "4.7",
"No", "Yes", "166cm", "60kg", STR_TO_DATE('2020-09-17','%Y-%m-%d'));

INSERT INTO DONOR_MEDICAL_HISTORY VALUES(006, 41, "16.2", "10.6*10^9", "5.1",
"Yes", "No", "149cm", "75kg", STR_TO_DATE('2020-06-27','%Y-%m-%d'));

INSERT INTO DONOR_MEDICAL_HISTORY VALUES(007, 32, "15.6", "8.6*10^9", "4.7",
"Yes", "Yes", "154cm", "59kg", STR_TO_DATE('2020-06-16','%Y-%m-%d'));

INSERT INTO DONOR_MEDICAL_HISTORY VALUES(008, 34, "13.9", "5.7*10^9", "4.8",
"No", "No", "160cm", "79kg", STR_TO_DATE('2020-06-23','%Y-%m-%d'));

INSERT INTO DONOR_MEDICAL_HISTORY VALUES(009, 25, "12.9", "6.2*10^9", "6.1",
"No", "Yes", "170cm", "62kg", STR_TO_DATE('2020-07-11','%Y-%m-%d'));

INSERT INTO DONOR_MEDICAL_HISTORY VALUES(010, 28, "13.2", "8.3*10^9", "4.9",
"No", "Yes", "154cm", "70kg", STR_TO_DATE('2020-08-20','%Y-%m-%d'));

INSERT INTO DONOR_MEDICAL_HISTORY VALUES(011, 32, "15.3", "9.4*10^9", "5.7",
"No", "No", "162cm", "74kg", STR_TO_DATE('2020-07-09','%Y-%m-%d'));

INSERT INTO DONOR_MEDICAL_HISTORY VALUES(012, 30, "14.7", "5.9*10^9", "6.5",
"No", "Yes", "156cm", "68kg", STR_TO_DATE('2020-05-22','%Y-%m-%d'));