SQL QUERIES

////////////////////////////

Query 1

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(select Count(*) as c from `Acceptor Diseases` as A

where A.DiseaseName = 'A') as AD

(select Count(*) as c from `Diseases` as D

where D.DiseaseName = 'A') as DD

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Query 2

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Select DISTINCT(D.DonorID) from `Donor Requests` as D

INNER JOIN `Donor Blood Groups` as DBG

ON DBG.DonorID = D.DonorID,

      (Select ABG.BloodGroupID, count(*) as c from `Acceptor Requests` as AR

      INNER JOIN `Acceptor Blood Groups` as ABG

      ON AR.AccID = ABG.AccID

      where AR.ReqDate > '2010-10-12' & AR.ReqDate < '2018-10-12'

      Group By ABG.BloodGroupID

      ORDER BY c DESC

```
      LIMIT 1) as T

where D.ReqDate > '2010-10-12' & D.ReqDate < '2018-10-12'

AND DBG.BloodGroupID = T.BloodGroupID


/////////////////////////////

Query 3

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Select BGG.BloodGroup from `BloodGroup` as BGG,

(Select DBG.BloodGroupID, count(*) as c from `Donor Requests` as DR

INNER JOIN `Donor Blood Groups` as DBG

ON DBG.DonorID = DR.DonorID

AND DR.ReqDate < '2020-10-01' AND DR.ReqDate > '2015-10-01'

GROUP BY DBG.BloodGroupID

ORDER BY c) as B,

(Select DBG.BloodGroupID, count(*) as c from `Blood Drive` as BD

INNER JOIN `Blood Drive Collection` as BDC

ON BDC.DriveID = BD.ID

INNER JOIN `Donor Blood Groups` as DBG

ON BDC.DonorID = DBG.DonorID

AND BD.DriveDate < '2020-10-01' AND BD.DriveDate > '2015-10-01'

GROUP BY DBG.BloodGroupID

ORDER BY c) as D

where B.c < D.c and B.BloodGroupID = D.BloodGroupID

AND BGG.ID = B.BloodGroupID
```

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Query 4

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Select D.DonorName ,D.ID from Donor as D, `Donor Blood Groups` as DBG, `BloodGroup` as BG

where D.Sex = 'F'

AND   D.ID = DBG.DonorID

AND BG.ID = DBG.BloodGroupID

AND BG.BloodGroup = 'A+'

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Query 5

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Select BG.BloodGroup,Count(*) as c from `Blood Sample` as BS

INNER JOIN `Donor Blood Groups` as DBG

ON DBG.DonorID = BS.DonorID

INNER JOIN `BloodGroup` as BG

ON BG.ID = DBG.BloodGroupID

where BS.BloodBankID = 1

GROUP BY DBG.BloodGroupID

ORDER BY c DESC

LIMIT 1

//////////////////////

Query 6

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Select A.AccName, A.ID

from Acceptor as A

where

    (Select MAX(count)

    from (Select B.AID as ID, count(*) as count from

        (Select BI.AccID as AID, BS.DonorID as DID from `Blood Sample` as

BS

        Inner Join `Blood Issued` as BI

        ON BS.SampleID = BI.SampleID) as B

        Group by B.AID , B.DID

) as X

    where A.ID = X.ID) > 2;

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Query 7

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Select AR.AccID from `Acceptor Requests` as AR,

    (Select * from Acceptor as A

        where Exists

(Select * from `Acceptor Diseases` as AD

where AD.AccID = A.ID)

and

(Select Count(*) from `Blood Issued` as BI

where BI.AccID = A.ID) <= 1

) as X

where

X.ID = AR.AccID

and

(Select MAX(Y.count) from

(Select AcR.AccID as ID, Count(*) as count

from `Acceptor Requests` as AcR

Group by AcR.AccID) as Y

where X.ID = Y.ID) = (Select Count(*) from `Acceptor Requests` as B where B.AccID = AR.AccID)

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Query 8

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Select A.Bgroup , IFNULL(A.S+B.S,0) as count

from

```sql
(Select BG.BloodGroup as Bgroup , sum(Z.Count) as S

from Donor as D

INNER JOIN

        (Select AD.CarrierID as ID, Count(*) as Count from `Diseases` as AD

        Group BY AD.CarrierID ) as Z

ON Z.ID = D.ID

INNER JOIN `Donor Blood Groups` as ABG

ON ABG.DonorID = D.ID

INNER JOIN BloodGroup as BG

ON ABG.BloodGroupID = BG.ID

Group By BG.BloodGroup)  as A


inner join


(Select BG.BloodGroup as Bgroup, sum(D.Count) as S

from Acceptor as A

INNER JOIN

        (Select AD.AccID as ID, Count(*) as Count from `Acceptor Diseases` as AD

        Group BY AD.AccID ) as D

ON D.ID = A.ID

INNER JOIN `Acceptor Blood Groups` as ABG

ON ABG.AccID = A.ID

INNER JOIN BloodGroup as BG

ON ABG.BloodGroupID = BG.ID

Group BY BG.BloodGroup) as B


ON B.Bgroup = A.Bgroup
```

ORDER BY count DESC

LIMIT 1

///////////////////////////

Query 9

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Select C.BloodGroup from BloodGroup as C,

    (Select DBG.BloodGroupID,count(*) as c from `Blood Drive Collection` as BDC

    INNER JOIN `Donor Blood Groups` as DBG

    ON BDC.DonorID = DBG.DonorID,

        (Select BD.ID from `Blood Drive` as BD

        ORDER BY BD.DriveDate DESC

        LIMIT 1) as X

    where X.ID = BDC.DriveID

    Group BY DBG.BloodGroupID) as A,

    (Select DBG.BloodGroupID,count(*) as c from `Blood Drive Collection` as BDC

    INNER JOIN `Donor Blood Groups` as DBG

    ON DBG.DonorID = BDC.DonorID,

        (Select BD.ID from `Blood Drive` as BD

        ORDER BY BD.DriveDate DESC

        LIMIT 1,1) as Y

where Y.ID = BDC.DriveID

Group BY DBG.BloodGroupID) as B

where C.ID = A.BloodGroupID

AND   A.BloodGroupID = B.BloodGroupID

AND   ((B.c - A.c) /B.c) *100 >= 10

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Query 10

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Select AVG(RD.age) as average from

(Select DISTINCT(DonorID), YEAR(CURDATE()) - YEAR(DateOfBirth) AS age from `Blood Sample` as BS

INNER JOIN Donor as D

ON D.ID = BS.DonorID) as RD

Select AVG(DD.age) as average from

(Select DISTINCT(DonorID), YEAR(CURDATE()) - YEAR(DateOfBirth) AS age from `Blood Drive Collection` as BS

INNER JOIN Donor as D

ON D.ID = BS.DonorID) as DD