

QUERY1:

```
$sql1= "SELECT D_ID from D_Disease where D_disease='$disease' ";
$result = mysqli_query($conn, $sql1);
$num_donors = mysqli_num_rows($result);
$sql1= "SELECT R_id from R_Disease where R_disease='$disease' ";
$result = mysqli_query($conn, $sql1);
$num_acceptors = mysqli_num_rows($result);
if($num_donors!=0 && $num_acceptors!=0){
    if($num_donors>$num_acceptors){
        echo "Donors are greater<br>";
    }else if($num_donors==$num_acceptors){
        echo "Acceptors and donors are equal\n";
    }else{
        echo "Acceptors are greater"."<br>";
    }
}else{
    echo "No such disease exist in donor and acceptor<br>";
}
```

QUERY4:

```
$sql= "SELECT D_Name FROM Blood_Donor WHERE
D_Blood_Group = '$b_group' and D_Gender = '$gender'";
$result = mysqli_query($conn, $sql);
$num = mysqli_num_rows($result);
if($num>0){
    while ($row = $result->fetch_assoc()){
        echo $row['D_Name']."<br>";
    }
}else{
    echo "No donor with this blood_group exists<br>";
}
```

QUERY5:

```
$sql2="SELECT D_Blood_Group
FROM Blood_Donor INNER JOIN D_Associated_With ON Blood_Donor.D_ID =
D_Associated_With.D_ID
WHERE B_ID=$b_id";
$result2 = mysqli_query($conn, $sql2);
while ($row = $result2->fetch_assoc()){
    if($row['D_Blood_Group']=='Ap'){
        $counts['Ap']++;
    }else if($row['D_Blood_Group']=='An'){
        $counts['An']++;
    }else if($row['D_Blood_Group']=='Bp'){
        $counts['Bp']++;
    }else if($row['D_Blood_Group']=='Bn'){
        $counts['Bn']++;
    }else if($row['D_Blood_Group']=='Op'){
        $counts['Op']++;
    }
}
```

```

}else if($row['D_Blood_Group']=='Onn'){
    $counts['Onn']++;
}else if($row['D_Blood_Group']=='ABp'){
    $counts['ABp']++;
}else if($row['D_Blood_Group']=='ABn'){
    $counts['ABn']++;
}
}
$maxs = array_keys($counts, max($counts));
foreach ($maxs as $max) {
    echo "Maximum blood group is: ", $max.'<br>';
}
$mins = array_keys($counts, min($counts));
foreach ($mins as $min) {
    echo "Minimum blood group is: ", $min.'<br>';
}

```

QUERY6:

```

$sql6="SELECT * FROM (SELECT R_id,SUM(Units_Issued) AS S,B_id FROM
Blood_Units_Issued GROUP BY B_id,R_id) AS T WHERE S>=2";
$result = mysqli_query($conn, $sql6);
while ($row = $result->fetch_assoc()){
    echo 'Recipient ID:',$row['R_id'],' Units Issued:',$row['S'],' BloodBank Id',$row['B_id']."<br>";
}

```

QUERY8:

```

$sql8 = "SELECT Blood_Group,No_Diseases FROM (SELECT Blood_Group,COUNT(Disease)
AS No_Diseases FROM ((SELECT D_Blood_Group AS Blood_Group,D_disease AS Disease
FROM Blood_Donor INNER JOIN D_Disease ON Blood_Donor.D_ID=D_Disease.D_ID) UNION
(SELECT R_blood_group,R_disease FROM Blood_Recipient INNER JOIN R_Disease ON
Blood_Recipient.R_id=R_Disease.R_id)) AS T1 GROUP BY Blood_Group) AS T2 WHERE
No_Diseases=(SELECT MAX(No_Diseases) FROM (SELECT Blood_Group,COUNT(Disease)
AS No_Diseases FROM ((SELECT D_Blood_Group AS Blood_Group,D_disease AS Disease
FROM Blood_Donor INNER JOIN D_Disease ON Blood_Donor.D_ID=D_Disease.D_ID) UNION
(SELECT R_blood_group,R_disease FROM Blood_Recipient INNER JOIN R_Disease ON
Blood_Recipient.R_id=R_Disease.R_id)) AS T1 GROUP BY Blood_Group) AS T2)";
$result = mysqli_query($conn, $sql8);
while ($row = $result->fetch_assoc()){
    echo 'Blood Group:',$row['Blood_Group'];
}

```

QUERY10:

```

$sql2 = "SELECT DISTINCT
Blood_Donor.D_Age,Blood_Donated.BD_id FROM Blood_Donor
LEFT OUTER JOIN Blood_Donated ON Blood_Donor.D_ID =
Blood_Donated. D_ID";
$result2 = mysqli_query($conn, $sql2);
while ($row = $result2->fetch_assoc()){
    if(is_null($row['BD_id'])){

```

```

echo "Donated in drive<br>";
$drive_donate += $row['D_Age'];
$num_drive_d++;
echo "drive is: ",$num_drive_d.'<br>';
}else{
$bank_donate += $row['D_Age'];
$num_bank_d+=1;
}
}
if($num_bank_d!=0){
$avg1=$bank_donate / $num_bank_d;
echo "bank donation average is: ",$avg1.'<br>' ;
}
if($num_drive_d!=0){
$avg2 = $drive_donate / $num_drive_d;
echo "Drive donation average is: ",$avg2.'<br>';
}
echo "difference is: ", $avg1 - $avg2,"<br>";

```

FRONT END(SCREENSHOR):

