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ROLL NO:15L124

DEPT:ECE-'A'

MINI PROJECT

PROGRAM:

//TO CALCULATE THE VISITORS COUNT

SOURCE CODE:

```
import java.io.BufferedReader;
import java.io.InputStreamReader;
import java.io.FileReader;
import java.io.IOException;
import java.io.FileNotFoundException;
import java.util.*;
class Visit{
  public static void main(String args[]) throws
IOException,FileNotFoundException{
    BufferedReader brf=new BufferedReader(new FileReader("Visitor.txt"));
    BufferedReader brc=new BufferedReader(new InputStreamReader(System.in));
    int visitors[][][];
    visitors=new int[12][][];
    int days[]={31,29,31,30,31,30,31,30,31,30,31};
    int i,j,k,check=1;
    int monthBoundary, monthBoundary1, monthBoundary2;
    int hourBoundary, hourBoundary1, hourBoundary2;
    int dayBoundary, dayBoundary1, dayBoundary2;
    int sumOfVisitors=0,avgOfVisitors,totSumOfVisitors=0;;
    int sum=0,sum1=0,sum2=0,sum3=0,count=0,tempSum,x,n,y,p,1,z,m;
    for(i=0;i<days.length;i++){</pre>
      visitors[i]=new int [days[i]][24];
    for(i=0;i<visitors.length;i++){</pre>
      for(j=0;j<visitors[i].length;j++){</pre>
        for(k=0;k<visitors[i][j].length;k++){</pre>
            visitors[i][j][k]=Integer.valueOf(brf.readLine());
```

```
do{
        System.out.println("\n0] VIEW YOUR VALUES 1] PARTICULAR MONTH
                                                                           2]
PARTICULAR DAY "+
                             "\n3] PARTICULAR HOUR 4] MONTH BOUNDARY
                                                                            5] DAY
BOUNDARY "+
                             "\n6] HOUR BOUNDARY
                                                   7] MULTIPLE MONTH
                                                                            8]
MULTIPLE DAY "+
                             "\n9] MULTIPLE HOUR
                                                    10] MULTIPLE MONTH & DAY &
HOUR");
       System.out.println("\nENTER THE OPTION TO CALCULATE THE VISITORS COUNT:");
       int g=Integer.valueOf(brc.readLine());
       switch(g){
          case 0:System.out.println("\nValues are.....");
                 for(i=0;i<visitors.length;i++){</pre>
                    for(j=0;j<visitors[i].length;j++){</pre>
                       for(k=0;k<visitors[i][j].length;k++){</pre>
                            System.out.print(visitors[i][j][k]+" ");
                        System.out.println("\n");
                     System.out.println("\n");
                 break;
         case 1:System.out.println("\n******PARTICULAR MONTH******");
                System.out.println("Enter the month to calculate the visitors");
                monthBoundary=Integer.valueOf(brc.readLine());
                sumOfVisitors=0;
                for(j=0;j<visitors[monthBoundary].length;j++){</pre>
                    for(k=0;k<visitors[monthBoundary][j].length;k++){</pre>
                         sumOfVisitors+=visitors[monthBoundary][j][k];
                avgOfVisitors=Math.round(sumOfVisitors/days[monthBoundary]);
                System.out.println("SUM OF THE VISITORS :"+sumOfVisitors);
                System.out.println("AVERAGE OF THE VISITORS:"+avgOfVisitors);
                break;
        case 2:System.out.println("\n*******PARTICULAR DAY*******");
               System.out.println("Enter the day to calculate the visitors");
               dayBoundary=Integer.valueOf(brc.readLine());
               sumOfVisitors=0;
               for(i=0;i<visitors.length;i++){</pre>
                   for(k=0;k<visitors[i][dayBoundary].length;k++){</pre>
                      sumOfVisitors+=visitors[i][dayBoundary][k];
                   }
```

```
avgOfVisitors=Math.round(sumOfVisitors/12);
       System.out.println("SUM OF THE VISITORS :"+sumOfVisitors);
       System.out.println("AVERAGE OF THE VISITORS:"+avgOfVisitors);
case 3:System.out.println("\n*******PARTICULAR HOUR*******");
       System.out.println("Enter the hour to calculate the visitors");
       hourBoundary=Integer.valueOf(brc.readLine());
       sumOfVisitors=0;
       for(i=0;i<visitors.length;i++){</pre>
           for(j=0;j<visitors[i].length;j++){</pre>
               sumOfVisitors+=visitors[i][j][hourBoundary];
        }
       avgOfVisitors=Math.round(sumOfVisitors/24);
       System.out.println("SUM OF THE VISITORS :"+sumOfVisitors);
       System.out.println("AVERAGE OF THE VISITORS:"+avgOfVisitors);
case 4:System.out.println("\n******MONTH BOUNDARY*******");
       System.out.println("Enter the month1 to calculate the visitors");
       monthBoundary1=Integer.valueOf(brc.readLine());
       System.out.println("Enter the month2 to calculate the visitors");
       monthBoundary2=Integer.valueOf(brc.readLine());
       sumOfVisitors=0;
       for(i=monthBoundary1;i<=monthBoundary2;i++){</pre>
           for(j=0;j<visitors[i].length;j++){</pre>
               for(k=0;k<visitors[i][j].length;k++){</pre>
                 sumOfVisitors+=visitors[i][j][k];
       sum=0;
       for(i=monthBoundary1;i<=monthBoundary2;i++){</pre>
           sum+=days[i];
           count+=1;
       avgOfVisitors=Math.round(sumOfVisitors / (sum / count));
       System.out.println("SUM OF THE VISITORS :"+sumOfVisitors);
       System.out.println("AVERAGE OF THE VISITORS:"+avgOfVisitors);
       break;
case 5:System.out.println("\n******DATE BOUNDARY*********");
       System.out.println("Enter the month1 to calculate the visitors");
       monthBoundary1=Integer.valueOf(brc.readLine());
       System.out.println("Enter the month2 to calculate the visitors");
       monthBoundary2=Integer.valueOf(brc.readLine());
```

```
System.out.println("Enter the day1 to calculate the visitors");
       dayBoundary1=Integer.valueOf(brc.readLine());
       System.out.println("Enter the day2 to calculate the visitors");
       dayBoundary2=Integer.valueOf(brc.readLine());
       sumOfVisitors=0;
       for(i=monthBoundary1;i<=monthBoundary2;i++){</pre>
           for(j=dayBoundary1;j<=dayBoundary2;j++){</pre>
               for(k=0;k<visitors[i][j].length;k++){</pre>
                  sumOfVisitors+=visitors[i][j][k];
        sum1=0;
        sum2=0;
        sum1+=monthBoundary2 - monthBoundary1 + 1;
        sum2+=dayBoundary2 - dayBoundary1 + 1;
        l=(sum1 + sum2) * 24;
        avgOfVisitors=Math.round(sumOfVisitors / 1);
        System.out.println("SUM OF THE VISITORS
                                                   :"+sumOfVisitors);
        System.out.println("AVERAGE OF THE VISITORS:"+avgOfVisitors);
        break;
case 6: System.out.println("\n******HOUR BOUNDARY*******");
        System.out.println("Enter the month1 to calculate the visitors");
        monthBoundary1=Integer.valueOf(brc.readLine());
        System.out.println("Enter the month2 to calculate the visitors");
        monthBoundary2=Integer.valueOf(brc.readLine());
        System.out.println("Enter the day1 to calculate the visitors");
        dayBoundary1=Integer.valueOf(brc.readLine());
        System.out.println("Enter the day2 to calculate the visitors");
        dayBoundary2=Integer.valueOf(brc.readLine());
        System.out.println("Enter the hour1 to calculate the visitors");
        hourBoundary1=Integer.valueOf(brc.readLine());
        System.out.println("Enter the hour2 to calculate the visitors");
        hourBoundary2=Integer.valueOf(brc.readLine());
        sumOfVisitors=0;
        for(i=monthBoundary1;i<=monthBoundary2;i++){</pre>
            for(j=dayBoundary1;j<=dayBoundary2;j++){</pre>
                for(k=hourBoundary1;k<=hourBoundary2;k++){</pre>
                   sumOfVisitors+=visitors[i][j][k];
        sum1=0;
        sum2=0;
        sum3=0;
```

```
sum1 = monthBoundary2 - monthBoundary1 + 1;
                sum2 = dayBoundary2 - dayBoundary1 + 1;
                sum3 = hourBoundary2 - hourBoundary1 + 1;
                tempSum=sum1 * (sum2 * sum3);
                avgOfVisitors=Math.round(sumOfVisitors / tempSum);
                System.out.println("SUM OF THE VISITORS :"+sumOfVisitors);
                System.out.println("AVERAGE OF THE VISITORS:"+avgOfVisitors);
                break;
        case 7: System.out.println("*****MULTIPLE MONTH BOUNDARY******");
                System.out.println("ENTER THE NUMBER OF BOUNDARY....");
                n=Integer.valueOf(brc.readLine());
                totSumOfVisitors=0;
                sum=0;
                count=0;
                for(y=0;y<n;y++){
                    System.out.println("\n*******MONTH-"+(y+1)+"
BOUNDARY********);
                    System.out.println("Enter the month1 to calculate the
visitors");
                    monthBoundary1=Integer.valueOf(brc.readLine());
                    System.out.println("Enter the month2 to calculate the
visitors");
                    monthBoundary2=Integer.valueOf(brc.readLine());
                    sumOfVisitors=0;
                    for(i=monthBoundary1;i<=monthBoundary2;i++){</pre>
                       for(j=0;j<visitors[i].length;j++){</pre>
                          for(k=0;k<visitors[i][j].length;k++){</pre>
                            sumOfVisitors+=visitors[i][j][k];
                    totSumOfVisitors+=sumOfVisitors;
                    for(x=monthBoundary1;x<=monthBoundary2;x++){</pre>
                         sum+=days[x];
                          count+=1;
               avgOfVisitors=Math.round(totSumOfVisitors / (sum / count));
               System.out.println("SUM OF THE VISITORS :"+totSumOfVisitors);
               System.out.println("AVERAGE OF THE VISITORS:"+avgOfVisitors);
               break;
       case 8: System.out.println("\n*****SINGLE MONTH AND MULTIPLE DAY
BOUNDARY****");
               System.out.println("Enter the month1 to calculate the visitors");
               monthBoundary1=Integer.valueOf(brc.readLine());
```

```
System.out.println("Enter the month2 to calculate the visitors");
               monthBoundary2=Integer.valueOf(brc.readLine());
               System.out.println("ENTER THE NUMBER OF DAYS BOUNDARY--MONTH:"+
                            monthBoundary1+"-"+monthBoundary2+" ....");
               n=Integer.valueOf(brc.readLine());
               totSumOfVisitors=0;
               sum1=0;
               sum2=0;
               for(y=0;y<n;y++){
                   System.out.println("\n*****DAY-"+(y+1)+" BOUNDARY*****");
                   System.out.println("Enter the day1 to calculate the
visitors");
                   dayBoundary1=Integer.valueOf(brc.readLine());
                   System.out.println("Enter the day2 to calculate the
visitors");
                   dayBoundary2=Integer.valueOf(brc.readLine());
                   sumOfVisitors=0;
                   for(i=monthBoundary1;i<=monthBoundary2;i++){</pre>
                      for(j=dayBoundary1;j<=dayBoundary2;j++){</pre>
                          for(k=0;k<visitors[i][j].length;k++){</pre>
                           sumOfVisitors+=visitors[i][j][k];
                       }
                   totSumOfVisitors+=sumOfVisitors;
                   sum1+=dayBoundary2 - dayBoundary1 + 1;
               sum2 = monthBoundary2 - monthBoundary1 + 1;
               tempSum = (sum1 + sum2) * 24;
               avgOfVisitors=Math.round(totSumOfVisitors / tempSum);
               System.out.println("SUM OF THE VISITORS :"+totSumOfVisitors);
               System.out.println("AVERAGE OF THE VISITORS:"+avgOfVisitors);
               break;
       case 9: System.out.println("\n****SINGLE MONTH & DATE AND MULTIPLE HOUR
BOUNDARY****");
               System.out.println("Enter the month1 to calculate the visitors");
               monthBoundary1=Integer.valueOf(brc.readLine());
               System.out.println("Enter the month2 to calculate the visitors");
               monthBoundary2=Integer.valueOf(brc.readLine());
               System.out.println("Enter the day1 to calculate the visitors");
               dayBoundary1=Integer.valueOf(brc.readLine());
               System.out.println("Enter the day2 to calculate the visitors");
               dayBoundary2=Integer.valueOf(brc.readLine());
               System.out.println("ENTER THE NUMBER OF HOUR BOUNDARY--
MONTH: "+monthBoundary1+
```

```
"-"+monthBoundary2+" & DAY:"+dayBoundary1+"-
+dayBoundary2+" ....");
               n=Integer.valueOf(brc.readLine());
               totSumOfVisitors=0;
               sum1=0;
               sum2=0;
               sum3=0;
               for(y=0;y<n;y++){
                  System.out.println("\n******HOUR-"+(y+1)+" BOUNDARY*******);
                  System.out.println("Enter the hour1 to calculate the
visitors");
                       hourBoundary1=Integer.valueOf(brc.readLine());
                  System.out.println("Enter the hour2 to calculate the
visitors");
                  hourBoundary2=Integer.valueOf(brc.readLine());
                  sumOfVisitors=0;
                  for(i=monthBoundary1;i<=monthBoundary2;i++){</pre>
                      for(j=dayBoundary1;j<=dayBoundary2;j++){</pre>
                         for(k=hourBoundary1;k<=hourBoundary2;k++){</pre>
                              sumOfVisitors+=visitors[i][j][k];
                          }
                   totSumOfVisitors+=sumOfVisitors;
                   sum3+= hourBoundary2 - hourBoundary1 + 1;
                sum1 = monthBoundary2 - monthBoundary1 + 1;
                sum2 = dayBoundary2 - dayBoundary1 + 1;
                tempSum=sum1 * (sum2 * sum3);
                avgOfVisitors=Math.round(totSumOfVisitors / tempSum);
                System.out.println("SUM OF THE VISITORS :"+totSumOfVisitors);
                System.out.println("AVERAGE OF THE VISITORS:"+avgOfVisitors);
                break;
        case 10:System.out.println("\n*****MULTIPLE MONTH & DAY & HOUR
BOUNDARY****");
                System.out.println("ENTER THE NUMBER OF BOUNDARY FOR MONTH....");
                n=Integer.valueOf(brc.readLine());
                totSumOfVisitors=0;
                sum=0;
                count=0;
                for(y=0;y<n;y++){
                   System.out.println("\n*****MONTH-"+(y+1)+" BOUNDARY*****");
                   System.out.println("Enter the month1 to calculate the
visitors");
                   monthBoundary1=Integer.valueOf(brc.readLine());
```

```
System.out.println("Enter the month2 to calculate the
visitors");
                   monthBoundary2=Integer.valueOf(brc.readLine());
                   System.out.println("ENTER THE NUMBER OF BOUNDARY FOR
DAYS....");
                   m=Integer.valueOf(brc.readLine());
                   for (z=0;z<m;z++){
                      System.out.println("\n*****MONTH-"+(y+1)+"DAY-"+(z+1)+"
BOUNDARY****");
                      System.out.println("Enter the day1 to calculate the
visitors");
                      dayBoundary1=Integer.valueOf(brc.readLine());
                      System.out.println("Enter the day2 to calculate the
visitors");
                      dayBoundary2=Integer.valueOf(brc.readLine());
                      System.out.println("ENTER THE NUMBER OF BOUNDARY FOR
HOUR....");
                      x=Integer.valueOf(brc.readLine());
                      for(p=0;p<x;p++)
                          System.out.println("\n**********MONTH-"+(y+1)+"DAY-
"+(z+1)+
                                              "HOUR-"+(p+1)+" BOUNDARY******");
                          System.out.println("Enter the hour1 to calculate the
visitors");
                              hourBoundary1=Integer.valueOf(brc.readLine());
                          System.out.println("Enter the hour2 to calculate the
visitors");
                                hourBoundary2=Integer.valueOf(brc.readLine());
                          sumOfVisitors=0;
                          for(i=monthBoundary1;i<=monthBoundary2;i++){</pre>
                              for(j=dayBoundary1;j<=dayBoundary2;j++){</pre>
                                   for(k=hourBoundary1;k<=hourBoundary2;k++){</pre>
                                          sumOfVisitors+=visitors[i][j][k];
                      totSumOfVisitors+=sumOfVisitors;
                 System.out.println("SUM OF THE VISITORS :"+totSumOfVisitors);
      default : System.out.println(".....Oops!!!! WRONG ENTRY....\n"+
                                     PLEASE ENTER THE VALID CASE!!!!! ");
                 break;
```

```
}
System.out.println("PRESS 1 TO CONTINUE THE PROCESS");
check=Integer.valueOf(brc.readLine());
} while(check == 1 );
}
```

OUTPUT:

```
C:\Users\students\Documents\VISITORS>javac Visit.java
C:\Users\students\Documents\VISITORS>java Visit
0] VIEW YOUR VALUES 1] PARTICULAR MONTH 2] PARTICULAR DAY
3] PARTICULAR HOUR 4] MONTH BOUNDARY 5] DAY BOUNDARY 6] HOUR BOUNDARY 7] MULTIPLE MONTH 8] MULTIPLE DAY
                    10] MULTIPLE MONTH & DAY & HOUR
9] MULTIPLE HOUR
ENTER THE OPTION TO CALCULATE THE VISITORS COUNT:
3
**********PARTICULAR HOUR**********
Enter the hour to calculate the visitors
6
SUM OF THE VISITORS
                       :27077
AVERAGE OF THE VISITORS:1128
PRESS 1 TO CONTINUE THE PROCESS
C:\Users\students\Documents\VISITORS>javac Visit.java
C:\Users\students\Documents\VISITORS>java Visit
0] VIEW YOUR VALUES 1] PARTICULAR MONTH 2] PARTICULAR DAY
3] PARTICULAR HOUR 4] MONTH BOUNDARY 5] DAY BOUNDARY 6] HOUR BOUNDARY 7] MULTIPLE MONTH 8] MULTIPLE DAY
9] MULTIPLE HOUR
                    10] MULTIPLE MONTH & DAY & HOUR
ENTER THE OPTION TO CALCULATE THE VISITORS COUNT:
4
Enter the month1 to calculate the visitors
Enter the month2 to calculate the visitors
SUM OF THE VISITORS
                      :109177
AVERAGE OF THE VISITORS:3639
PRESS 1 TO CONTINUE THE PROCESS
```

```
C:\Users\students\Documents\VISITORS>java Visit
0] VIEW YOUR VALUES 1] PARTICULAR MONTH 2] PARTICULAR DAY
3] PARTICULAR HOUR 4] MONTH BOUNDARY 5] DAY BOUNDARY 6] HOUR BOUNDARY 7] MULTIPLE MONTH 8] MULTIPLE DAY
                    10] MULTIPLE MONTH & DAY & HOUR
9] MULTIPLE HOUR
ENTER THE OPTION TO CALCULATE THE VISITORS COUNT:
Enter the month1 to calculate the visitors
Enter the month2 to calculate the visitors
Enter the day1 to calculate the visitors
Enter the day2 to calculate the visitors
Enter the hour1 to calculate the visitors
6
Enter the hour2 to calculate the visitors
SUM OF THE VISITORS
                      :655
AVERAGE OF THE VISITORS:81
PRESS 1 TO CONTINUE THE PROCESS
```

```
C:\Users\students\Documents\VISITORS>javac Visit.java
C:\Users\students\Documents\VISITORS>java Visit
0 VIEW YOUR VALUES 1 PARTICULAR MONTH 2 PARTICULAR DAY
3] PARTICULAR HOUR 4] MONTH BOUNDARY 5] DAY BOUNDARY 6] HOUR BOUNDARY 7] MULTIPLE MONTH 8] MULTIPLE DAY
9] MULTIPLE HOUR 10] MULTIPLE MONTH & DAY & HOUR
ENTER THE OPTION TO CALCULATE THE VISITORS COUNT:
ENTER THE NUMBER OF BOUNDARY....
Enter the month1 to calculate the visitors
2
Enter the month2 to calculate the visitors
3
SUM OF THE VISITORS
                    :108978
AVERAGE OF THE VISITORS:3632
PRESS 1 TO CONTINUE THE PROCESS
C:\Users\students\Documents\VISITORS>javac Visit.java
C:\Users\students\Documents\VISITORS>java Visit
0] VIEW YOUR VALUES 1] PARTICULAR MONTH 2] PARTICULAR DAY
3] PARTICULAR HOUR 4] MONTH BOUNDARY 5] DAY BOUNDARY
6] HOUR BOUNDARY
                  7] MULTIPLE MONTH
                                     8] MULTIPLE DAY
9] MULTIPLE HOUR 10] MULTIPLE MONTH & DAY & HOUR
ENTER THE OPTION TO CALCULATE THE VISITORS COUNT:
8
************SINGLE MONTH AND MULTIPLE DAY BOUNDARY***********
Enter the month1 to calculate the visitors
Enter the month2 to calculate the visitors
ENTER THE NUMBER OF DAYS BOUNDARY--MONTH:2-3 ....
Enter the day1 to calculate the visitors
Enter the day2 to calculate the visitors
SUM OF THE VISITORS
                   :7333
AVERAGE OF THE VISITORS:76
PRESS 1 TO CONTINUE THE PROCESS
```

```
0] VIEW YOUR VALUES 1] PARTICULAR MONTH 2] PARTICULAR DAY
3] PARTICULAR HOUR 4] MONTH BOUNDARY
                                      5] DAY BOUNDARY
6] HOUR BOUNDARY 7] MULTIPLE MONTH 8] MULTIPLE DAY
9] MULTIPLE HOUR 10] MULTIPLE MONTH & DAY & HOUR
ENTER THE OPTION TO CALCULATE THE VISITORS COUNT:
*************SINGLE MONTH & DATE AND MULTIPLE HOUR BOUNDARY***********
Enter the month1 to calculate the visitors
Enter the month2 to calculate the visitors
Enter the day1 to calculate the visitors
Enter the day2 to calculate the visitors
ENTER THE NUMBER OF HOUR BOUNDARY--MONTH: 2-3 & DAY: 4-5 ....
Enter the hour1 to calculate the visitors
Enter the hour2 to calculate the visitors
4
Enter the hour1 to calculate the visitors
12
Enter the hour2 to calculate the visitors
12
SUM OF THE VISITORS
                   :905
AVERAGE OF THE VISITORS:75
PRESS 1 TO CONTINUE THE PROCESS
```

```
C:\Users\students\Documents\VISITORS>javac Visit.java

C:\Users\students\Documents\VISITORS>java Visit

0] VIEW YOUR VALUES 1] PARTICULAR MONTH 2] PARTICULAR DAY

3] PARTICULAR HOUR 4] MONTH BOUNDARY 5] DAY BOUNDARY

6] HOUR BOUNDARY 7] MULTIPLE MONTH 8] MULTIPLE DAY

9] MULTIPLE HOUR 10] MULTIPLE MONTH & DAY & HOUR

ENTER THE OPTION TO CALCULATE THE VISITORS COUNT:

12
.....Oops!!!! WRONG ENTRY....

PLEASE ENTER THE VALID CASE!!!!!

PRESS 1 TO CONTINUE THE PROCESS
```

```
C:\Users\students\Documents\VISITORS>javac Visit.java
C:\Users\students\Documents\VISITORS>java Visit
0] VIEW YOUR VALUES 1] PARTICULAR MONTH 2] PARTICULAR DAY
3] PARTICULAR HOUR 4] MONTH BOUNDARY 5] DAY BOUNDARY 6] HOUR BOUNDARY 7] MULTIPLE MONTH 8] MULTIPLE DAY
9] MULTIPLE HOUR 10] MULTIPLE MONTH & DAY & HOUR
ENTER THE OPTION TO CALCULATE THE VISITORS COUNT:
************MULTIPLE MONTH & DAY & HOUR BOUNDARY***********
ENTER THE NUMBER OF BOUNDARY FOR MONTH....
Enter the month1 to calculate the visitors
Enter the month2 to calculate the visitors
3
ENTER THE NUMBER OF BOUNDARY FOR DAYS....
Enter the day1 to calculate the visitors
Enter the day2 to calculate the visitors
ENTER THE NUMBER OF BOUNDARY FOR HOUR....
Enter the hour1 to calculate the visitors
Enter the hour2 to calculate the visitors
Enter the hour1 to calculate the visitors
Enter the hour2 to calculate the visitors
SUM OF THE VISITORS :1219
PRESS 1 TO CONTINUE THE PROCESS
```