NAME- PARTH AGNIHOTRI

SEC-T(2)

ROLL-NO:-41

UNIVERSITY ROLLNO.

2215001213

(JAVA ASSIGNMENT)

Question1:- Sum of odd placed and even placed digits

Solution:-

```
import java.util.*;
public class Main {

    public static void main(String args[]) {
Scanner sc=new Scanner(System.in);
String s[]=sc.next().split("");
int a[]=new int[s.length];
for(int i=0;i<s.length;i++)
{
a[i]=Integer.parseInt(s[i]);
}
int even=0,odd=0;
for(int i=a.length-1;i>=0;i--)
{
int pos=a.length-i+1;
if(pos%2==0)
even=even+a[i];
else
```

```
odd=odd+a[i];
}
System.out.println(even);
System.out.println(odd);

   }
}
```

Question2:- Count Digits

Solution:-

```
import java.util.*;
public class Main
{
public static void main(String[] args) {
   Scanner sc=new Scanner(System.in);
   int n =sc.nextInt();
   int b=sc.nextInt();
   int c=0;
   while(n!=0){
      int m=n%10;
      if(m==b)
      c++;
      n=n/10;

   }
   System.out.println(c);



}
}
```

Question:3 Print Reverse

Solution:-

```
import java.util.*;
public class Main
{
public static void main(String[] args) {
    Scanner sc=new Scanner(System.in);
    int n=sc.nextInt();
    int sum=0;
    int b=0;
    while(n!=0){
         b=n%10;
        sum=sum*10+b;
        n=n/10;

    }
    System.out.print(sum);

}
}
```

Question:4 Binary to Decimal

Solution:-

```
import java.util.*;
public class Main
{
public static void main(String[] args) {
    Scanner sc=new Scanner(System.in);
```

```
    int n= sc.nextInt();
    int sum =0;
    int i=0;
    while(n!=0){
        int r=n%10;
       int dec= r*(int)Math.pow(2,i);
       sum=sum+dec;
       n=n/10;
       i++;
    }
    System.out.println(sum);
//System.out.println("Hello World");
}
}
```

Question:5 LCM

Solution:-

```
import java.util.*;
public class Main
{
public static void main(String[] args) {
    Scanner sc=new Scanner(System.in);
    int n1=sc.nextInt();
    int n2=sc.nextInt();
    int gcd=1;
    for(int i=1;i<=n1&&i<=n2;i++){
        if(n1%i==0&&n2%i==0)
        gcd=i;
    }
    int lcm=(n1*n2)/gcd;
```

```
    System.out.println(lcm);

    }
//System.out.println("Hello World");
}
```

Question:6 Nth Fibonacci

Solution:-

```
import java.util.*;
public class Main {
    //Nth Fibonacci (Hard)
    static int fibo(int n){
        if (n <= 1)    //Base equation
        return n;
        return fibo(n - 1) + fibo(n - 2);
    }
    public static void main(String args[]){
        Scanner sc = new Scanner(System.in);//Taking input of no.
        int n = sc.nextInt();
        System.out.println(fibo(n));
    }
}
```

Question:7_Conversion (Fahrenheit to Celsius)

Solution:-

```
import java.util.*;
public class Main {
    public static void main(String args[]) {
        // Conversion (Fahrenheit to Celsius)
```

```
        Scanner sc = new Scanner(System.in);//TAKING INPUT
        int minf = sc.nextInt();//Minimum Fahrenheit value
        int maxf = sc.nextInt();//Maximum Fahrenheit value
        int step = sc.nextInt();//Step b|w them
        int tempf=minf;
        int c = 0;
        while(tempf<=maxf){
            c=(((tempf-32)*5)/9);
            System.out.println(tempf+"    "+c);
            tempf=tempf+step;
        }
    }
}
```

Question:8 Inverse of a Number

Solution:-

```
import java.util.*;
public class Main {
    public static void main(String args[]) {
        //Inverse NO.
        Scanner sc = new Scanner(System.in);//Taking input
        int n = sc.nextInt();
        int [] a = new int[10];//Defining an array
        int count =1;
        while(n>0){
            a[n%10]=count;
            count++;
            n/=10;
```

```
        }
        for(int i= a.length-1;i>0;i--){
            if(a[i]!=0){
                System.out.print(a[i]);//Printing array elements
            }
        }
    }
}
```

Question:9 GCD

Solution:-

```
import java.util.*;
public class Main
{
public static void main(String[] args) {
    Scanner sc=new Scanner(System.in);
    int n= sc.nextInt();
    int v=sc.nextInt();
    int gcd=1;
    for(int i=1;i<=n&&i<=v;i++){
        if(n%i==0&&v%i==0)
        gcd=i;

    }
    System.out.print(gcd);

}
```

```
}
```

Question10: Check Prime

Solution:-

```
import java.util.*;
public class Main {
    public static void main(String args[]) {
        //CHECK PRIME
        Scanner sc = new Scanner(System.in);//Taking Input
        int n = sc.nextInt();
        int i,m=0,flag=0;
        m=n/2;
        if(n==0||n==1){
        System.out.println("Not Prime");
        }else{
        for(i=2;i<=m;i++){
            if(n%i==0){
                System.out.println("Not Prime");
              flag=1;
              break;
            }
        }
        if(flag==0){
            System.out.println("Prime");
        }
        }

    }
```

```
}
```

Question11: Chewbacca and Number

Solution:-

```
import java.util.*;
public class Main {
    public static void main(String args[]) {
        //Chewbacca and Number
        Scanner sc = new Scanner(System.in);
long n = sc.nextLong();//Taking long input from user
long[] a = new long[18];//Defining an array
int count = 0;
while (n != 0) {
long rem = n % 10;
a[count] = rem;
count++;
n = n / 10;
}
for (int i = 0; i < count; i++) {
if (i != count - 1) {
if (a[i] >= 5) {
a[i] = 9 - a[i];
}
} else {
if (a[i] >= 5 && a[i] <= 8) {
a[i] = 9 - a[i];
}
```

```
}
}

for (int i = count - 1; i >= 0; i--) {
System.out.print(a[i]);
}

   }
}
```

Question12: Replace Them All

Solution:

```
import java.util.*;
public class Main
{
public static void main(String[] args) {
    Scanner sc=new Scanner(System.in);
    long n= sc.nextLong();
    String d=Long.toString(n);
    String r=d.replace('0','5');
    long b=Long.parseLong(r);
    System.out.println(b);
//System.out.println("Hello World");
}
}
```

Question13: Simple Input

Solution:-

```
import java.util.Scanner;
```

```
public class Main {
    public static void main(String[] args) {
        Scanner scanner = new Scanner(System.in);

        int cumulativeSum = 0;

        while (true) {
            int number = scanner.nextInt();
            cumulativeSum += number;

            if (cumulativeSum >= 0) {
                System.out.println(number);
            } else {
                break;
            }
        }
    }
}
```

Question14:Print Armstrong

Solution:-

```
import java.util.*;
public class Main
{
public static void main(String[] args) {
    Scanner sc=new Scanner(System.in);
    int n= sc.nextInt();
    int b=sc.nextInt();
    for(int i=n;i<=b;i++){
```

```
        int sum=0;
        int r=0;
        int c=i;
        while(c!=0){
            r=c%10;
            sum=sum+(r*r*r);
            c=c/10;
        }
        if(sum==i){
            System.out.println(i);
        }
    }


//System.out.println("Hello World");
}
}
```

Question15: Print Series

Solution:

```
import java.util.*;
public class Main
{
public static void main(String[] args) {
    Scanner sc=new Scanner(System.in);
    int n1=sc.nextInt();
    int n2=sc.nextInt();
    int n=1;
    int c=0;
```

```
    for(int i=1;i<=n1+c;i++){
        int x=3*n+2;
        if(x%n2==0){
        c++;
    }else{
        System.out.println(x);
    }
//System.out.println("Hello World");
n++;
}

}
}
```

Question16:Boston Number

Solution:-

```
import java.util.Scanner;

public class Main {

public static int primeFactors(long n)
    {   int sum= 0 ;
        while (n%2==0)
        {
            sum+=2;
            n /= 2;
        }

        for (int i = 3; i <= Math.sqrt(n); i+= 2)
```

```
        {
            while (n%i == 0)
            {
            sum+=i;
            n /= i;
            }
        }

        if (n > 2)
            sum+=n ;

        return sum ;
    }

public static void main(String[] args) {
        Scanner scn = new Scanner(System.in) ;
        long N= scn.nextLong();


        int sod=0;
        long temp=N ;
        while(temp!=0)
        {
            sod+=temp%10;
            temp/=10;
        }
        for(int i=2;i*i<=N;i++)
            if(N%i==0)
```

```
    {
        int count=0;
        while(N%i==0)
        {
            N/=i;
            count++;
        }
        int sum=0;
         temp=i;
        while(temp!=0)
        {
            sum+=temp%10;
            temp/=10;
        }
        sod-=sum*count;
    }
if(N!=1)
{
    int sum=0;
        temp=N;
        while(temp!=0)
        {
            sum+=temp%10;
            temp/=10;
        }
    sod-=sum;
}
```

```
        if(sod==0)
        System.out.println("1");
        else
        System.out.println("0");
        }
}
```

Question17: Shopping Gamee

Solution:-

```
import java.util.*;
public class Main
{
public static void main(String[] args) {
    Scanner sc=new Scanner(System.in);
    int t= sc.nextInt();
while(t>0){
int suma=0;
int sumh=0;
int m= sc.nextInt();
int n= sc.nextInt();
for(int i=1;i<=m;i=i+2){
     suma= suma+i;
    if(suma>=m)
        break;

}
for(int j=2;j<=n;j=j+2){
     sumh=sumh+j;
```

```
    if(sumh>=n)
        break;

}
if(suma>sumh)
    System.out.println("Aayush");
else
    System.out.println("Harshit");
    t--;

}
}
}
```

Question18: Odd Even in Delhi

Solution:-

```
import java.util.*;
public class Main
{
public static void main(String[] args) {
    Scanner sc=new Scanner(System.in);
    int n= sc.nextInt();
while(n>0){
    long c=sc.nextLong();
    long sumeven=0;
    long oddsum=0;
long l=(long)Math.log10(c)+1;
    for(int i=1;i<=l;i++){
        long r=c%10;
        if(r%2==0)
```

```
        sumeven=sumeven+r;
        else
        oddsum=oddsum+r;
        c=c/10;
    }
    if(sumeven%4==0||oddsum%3==0)
        System.out.println("Yes");
    else
        System.out.println("No");
n--;
}

}
}
```

Question19: is ArmStrong

Solution:-

```
import java.util.*;
public class Main
{
public static void main(String[] args) {
    Scanner sc=new Scanner(System.in);
    int n= sc.nextInt();
    int temp=n;
    int sum=0;
    int r=0;
    int b=0;
    while(temp!=0){
        temp=temp/10;
```

```
        b++;
    }
//    for(int i=1;i<=temp;i++){
temp=n;
    while(temp!=0){
        r=temp%10;
        sum=sum+(int)Math.pow(r,b);
        temp =temp/10;

    }
///    System.out.print(sum);
    if(n==sum){
       System.out.print("true");

}
else
System.out.println("false");
//    }
}
}
```

Question18: