1) write a Program to count all the Prime and composite numbers entered by the user.

Sample Input:

Enter the numbers

4
54
29
71
7
59
98
23

Sample output:

Composite number : 3

Prime number : 5

```
int arr[]={4,54,29,71,7,59,98,23};
int com=0,Pri=0;
for(int i=0;i<arr.length;i++)
{
    if(arr[i]%5==0)
        c++;
}
if (cc>1)
    com++;
else
    Pri++;
}
System.out.Print("compositeNumber: "+com);
System.out.println("\nPrime number: "+Pri);
```

2. Find the Mth maximum number and Nth minimum number in an array and the sum of M and difference of M.

Array of elements = {14, 16, 87, 36, 25, 89, 34};

M = 1

N = 3

Sample output:

1st maximum number = 89

3rd minimum Number = 25

Sum = 114

```
int arr[] = {14, 16, 87, 36, 25, 89, 34};
int len = arr.length;
for (int i=0; i<len; i++) {
    for (int j = i+1; j < len; j++){
        int temp = arr[i];
        arr[i] = arr[j];
        arr[j] = temp;
    }
}
int m = 1, n = 3;
int max = arr[len-m];
int min = arr[n-1];
```

```
System.out.Print("maximum number = "+max);
System.out.Print("\n" +n+" minimum number = "+min);
int sum = max+min;
int Diff = max-min;
System.out.Print("\nsum = "+sum);
int Sum = max+min;
int Diff = max-min;
int Diff = max-min;
System.out.Print("\nDifference = "+Diff);
```

3)

Enter the 1st Denomination: 500

Enter the 2nd Denomination number of notes: 4

Enter the 2nd Denomination 100

Enter the 2nd Denomination number of notes 20

Enter the 3rd Denomination " 20

Enter the 3rd Denomination " 2000

Enter the 4th Denomination number of notes

Enter the 4th " "

Total Available Balance ~~of notes~~ in ATM : 1240

int n1=500, d1=4, n2=100, d2=20, d2=20, n3=200,

d3=32, n4=2000, d4=1;

int Total=(n1*d1)+(n2*d2)+(n3*d3)+(n4*d4);

System.Out.Print("Total Available Balance in

Atm"+Total);

A>. write a Program using choice to check

Case:1 ?Given string is Palindrome or not

Case:2 Given number is Palindrome or not

Sample Input:

Case=1

String = MADAM

Palindrome.

```
String s1 = "MADAM";
String s2 = "";
for(int i=len-1; i>=0; i==)
 {
      s2=s2+s1.charAt(i);
}
```

else

System.out.Print("Not Palindrome");

5). write a Program to Convert Decimal number equivalent number?

int dec = 15;

String bin = Integer.toBinaryString(dec);

String oct = Integer.toOctalString(dec);

System.out.Println("Binary number = "+bin);

System.out.Printf("octal number = "+oct);

6). write a Program to Print the first n Perfect Number:

N = 3

Sample output:

First 3 perfect number are: 6, 28, 496.

Scanner inPut = new Scanner(System.in);

Int n = inPut.nextInt();

Int Sum = 0, temP = 0;

for(int j = 2; j <= 1000; j++)

```
{
    if(j%i==0)
        sum=sum+j;
}
if(sum==j)
{
    System.out.Print(j+" ");
    temp=temp+1;
```

8). Write a program to Print the first n Perfect Numbers.

Sample input:

N=3

Sample output:

First 3 Perfect number are: 6, 28, 496.

```
Scanner input=new Scanner(System.in);
int sum=0, temp=0;
for(int j=2;j<=1000;j++)
{
    if(j%i==0)
        sum=sum+i;
}
if(sum==j)
{
```

```
System .out.Print (j+" ");
 temp=temp+I;
 }
}
```

9). write a Program to calculate tax given the following conditions:

Sample Input:

Enter the Income : 200000

Sample output:

Tax = 200000

```
Scanner input =new (System.in);
int Income =input.nextint();
float tax:
if (Income <=150000)
    System.out.Println ("No tax");
else if ('income >=150000 && income <=300000)
    System.out.println("Tax "+(Income/10);
else if (income >=300000 12& income <=500600)
    System .out. Println ("Tax =" +income/10);
else
    system.out.Println("Tax" +income(30);
```

10) write a program to print the multiplication table of number m upto n.

Sample Input:

M=4

N=5

Sample Output:

1 x 4 = 4

2 x 4 = 8

3 x 4 = 12

4 x 4 = 16

5 x 4 = 20

```
int m=4;
int N=5;
for (int i=1; i<=N; i++)
{
    System.out.Println(i+"x"+m+"=" + (i*m));
}
```