Java Programming	Name : Sathish kumar R Reg No : 192321148 Date : 31/01/2024 Assignment : 04

1. find the factorial of n!

```
import java.util.Scanner;
Public class factorial
{
   Public static void main (string [], args)
   {
   Scanner input=new scanner(system.in)
   Int n=input.nextInt();
   Int fact=1;
   for(Int i=1;i<n;i++)
   {
       fact = fact*i;
    }
    System.out.println (n+"factorial:"+ fact);
  }
}
```

2. Write a Program to Print the below Pattern

```
1
4 9
16 25 36
49 64 81 100
```

```
import java.util.Scanner;
Public class print Pattern;
{
  Public static void main (string[], args)
  {
  Scanner input =new scanner (system.in);
  Int n = input.nextInt();
```

```
int k=1;
for (int i=1; i<=n; i++)
{
  for (int j=1; j<=i; j++)
  {
    System.out.Print(k+" ");
    k++;
  }
  System.out.println();
}
}
```

23 Write a Program to find the number of composite numbers in an array of element.

```
import java.util.Scanner;
Public class Compositenumber
{
  Public static void main(String[] args)
  {
  Scanner input = new Scanner(System.in);
  int arr[]={16,18,27,16,23,21,19};
  int len = arr.length;
  int count=0;
  for (int i=0; i<len; i++)
  {
    int c=0;
    for (int j=1; j<100; j++)
    {
      if (arr[i]%j==0)
      {
        c++;
      }
    }if (c>2)
      count++;
    }
    System.out.println(count);
}}
```

4 Find the n^{th} odd Number after n odd number.

```
import java.util.Scanner;
Public class oddnumber
{
  Public static void main (String [], args)
  int n=input.nextInt();
  int arr[]=new int[100];
  int i=1;
  for (int i=1;i<100;i++)
  {
    if(i%2!=0)
    {
      arr[i]=i;
      i++;
    }
  }
  System.out.println(arr(n*2));
}
```

5. Write a Program that find whether a given character is present in a string or not.

```
import java.util.Scanner;
Public class character;
{
  Public static void main (String[], args)
  {
    Scanner input=new Scanner (System.in)
    String str=input.nextline();
    Char c=input.next().charAt(0);
    Char arr[]=new char[str.length()];
    int len=str.length();
    int x=0;
    for(int i=0;i<len;i++
    {
```

```
arr[i] = str.charAt(i);
if(arr[i]==c)
{
System.out.println(c+" is found in string at index "+(i+1)

x=1;
}}
if(x==0)
System.out.Print("character not found");
}}
```

6. Write a Program to Print the below Pattern.

```
1
2 2
3 3 3
4 4 4 4
3 3 3
2 2
1
```

```
import java.util.Scanner;
Public class Print Pattern
{
Public Static void main (String[], args)
Scanner Input = new Scanner (System.in);
int n = input.nextInt();
for(int i=1; i<n; i++)
{
  for (int j=1; j<=i; j++)
  {
    System.out.Print(i);
  }
  System.out.println();
}
for (int i=n-1; i>=1; i--)
{
  for (int j=1; j<=i; j++)
  {
    System.out.Print(i);
  }
  System.out.println();
}}
```

7. Program to find whether the given number is Armstrong number or not.

```
Import java.util.Scanner;
Public class Armstrong
{
  Public Static void main (String[], args)
  {
  Scanner input = new Scanner (System.in);
  Int n = input.nextInt();
  int num1=n;
  int arm=0;
  while (num1!=0)
  {
    Int rem = num1%10;
    arm = arm+ (rem*rem*rem);
    num1 = num1/10;
  }
  if(n==arm)
    System.out.Println ("Armstrong number");
  else
    System.out.Print ("Not armstrong number");
  }
}
```

8. Write a Program to arrange the letter of the word alphabetically in reverse order.

```
Import Java.util.Scanner;
Import Java.util.Arrays;
Public clas ak
{
  Public Static Void main (String, args[])
  String name = Input.nextLine();
  Int len = name.length()
  Char arr[] = new Char [len];
```

```
String Alpha;
for(Int P=0; P<len; P++);
{
  arr[i] = name.charAt(i)
}
Arrays.Sort(arr);
for (Int P=Len-1; P>=0; P--)
{
  System.out.Print (arr[i]+" ");
}
}
```

9. Write a Program that accept a String from user and display the same String after removing vowels from it.

```
Import Java.Util.Scanner;
Public class removing vowels
{
  Public static void main(String[], args)
  {
    Scanner Input=new Scanner(System.in)
    String name=Input.nextLine();
    String n1=name.replaceAll("AeiOu AEIOU","");
    System.out.Println(n1);
  }
}
```

10. Write a Program to Print hollow square Boller Pattern?

```
import Java.util.Scanner;
Public class squareboller Pattern
{
 Public Static void main (String[] args)
 {
 Scanner input=new Scanner (System.in);
 int n=input.nextInt();
 for (int i=0; i<n; i++)
 {
  for (int j=0; j<n; j++)
  {
   if (i==0|| j==0|| i==n-1|| j==n-1)
    System.out.Print("*");
   else
    System.out.Print(" ");
  }
  System.out.Println();
 }
}
```