JAVA PROGRAMMING.

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31. 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++)
    {
      factors = fact * i;
    }
    System.out.println(n + " factorial = " + fact);
  }
}
```

39. Write a program to print the below Pattern.

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

```
import java.util.Scanner;
Public class Printpattern
{
   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+" ");
            k++ ;
         }
         System.out.println();
      }
   }
}
```

33. Write a program to find the number of composite numbers in an array of elements.

```
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);
    }
}
```

3. Find the nth odd number after n odd numbers

```
import java.util.Scanner;
Public class Oddnumbers
{
    Public Static void main(String[] args)
    {
        Scanner input=new Scanner(System.in);
        int n=input.nextInt();
        int arr[]=new int[100];
        int j=1;
        for(int i=1; i<100; i++)
        {
            if(i%2!=0)
            {
                arr[j]=i;
                j++;
```

```
            j++;
        }
    }
    System.out.println(arr[n*2]);
  }
}
```

35. Write a program that finds whether a given characters is present in a string or not.

```
import java.util.Scanner;
Public class characters
{
   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");
    }
}
```

36. 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 PrintPattern
{
  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(j);
      }
      System.out.println();
    }
    for(int i=n-1;i>=1;i--)
    {
      for(int j=1;j<=i;j++)
      {
        System.out.Print(j);
      }
      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[]Jargs)
    {
        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.Print("Armstrong
                                    number");
        else
            System.out.Print("Not Armstrong
                                    number");
    }
}
```

38. Write a program to arrange the letters of the word alphabetically in reverse Order.

```
import java.util.Scanner;
import java.util.Arrays;
Public class ak
{
   Public Static Void main(String args[])
   {
      Scanner input = new Scanner(System.in);
      String name = input.nextLine();
      int len = name.length();
      char arr[] = new char[len];
      String Alpha;
      for(int i=0; i<len; i++);
      {
         arr[i] = name.charAt(i);
      }
      Arrays.Sort(arr);
      for(int i=len-1; i>=0; i--)
      {
         System.out.Print(arr[i]+" ");
      }
   }
}
```

39. Write a Program that accepts a String from user and displays the same String after removing vowels from it.

```
import java.util.Scanner
Public class removingVowels
{
   Public Static Void main (String[]Jargs)
   {
      Scanner input = new Scanner (System.in)
      String name = input.nextLine();
      String n1 = name.replaceAll ("AeiOu
                                    AEIOU","");
      System.out.println(n1);
   }
}
```

40. Write a Program to print hollow Square Dollar Pattern?

```
import java.util.Scanner;
Public class SquareDollarPattern
{
   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();
    }
}
```