31) Find the factorial of n?

```java
import java.util.Scanner;
Public class factorial
{

    Public static void main (string [] args)
    {

        Scanner input = new Scanner (system. in):
        int n = input . next Int + ();
        int fact = 1;
        for (int i=1; i<=n; i++)
        {

            fact = fact * i;
        }
        system . out. Print ln (n + "factorial = +"fact);
    }
}
```

32. Write a Program to Print the below Pattern

```
1

4    9

16    25    36

49    64    81    100
```

```java
import java.util.Scanner;
public class Print Pattern
{
    Public static void main (String [] args)
    {
        Scanner input = new Scanner (system. in);
        int n = input. need Int ();
        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 Composite number
{
    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++)
        {
```

```java
    int c = 0;
    for (int j = 1; j < 100; j++)
    {
        if (arr[i] % j == 0)
        {
        }
            c++;
        }
    }
    if (c > 2)
        count++;
    }
    system.out. Println(count);

}
```

---

34. Find the nth odd number after n odd number

```java
import java. util. Scanner
Public class odd numbers
{
    Public static void main (string [] args)
    {
        scanner input = new Scanner (system in);
```

```java
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++;
    }
}
system .out. Println (arr [n*2]);
}
}
```

35. Write a Program that finds when a given characters is Present in a string or not.

```java
import java. util. Scanner;
Public class characters
{
```

```java
Public static void main (string [] args)
{
    Scanner input = new Scanner (system . in)
    string sto = input . next Line ();
    char arr [] = new chan [sto.length ()];
    int len = sto. length ();
    int x=0;

    for (int i =0; i < len; i++)
    {
        arr [i] = sto. char At (i);
        i + (arr [i] == ()
    }
    system . out. Print.In (c + " is found in
                            string at index :"+
                                        (i + 1)
        x = i;
    }
    }
    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
```

```java
import java.util.Scanner;
Public class Print Pattern
}
    Public static void main ( string [ ]args){
 -> scanner input = new Scanner (system. in);
    int n = input. next Int ();
    for (int i=1; i <=n; i++)
    }
        for (int j=1; j < i; j++)
        {
            system . out. Print ln ();
        }
        system. out. Print ln ();
```

```
    }
    for (int i=n-1; i >= 1; i--)
    {
        for (int j=1; j <= i; j++)
        {
            system. out. Print (i);
        }
        system. out. Print ln();
    }
}
```

37. 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 . next Int();
        int num := n;
```

```java
        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 letter
of the word ~~of~~ alphabetically in reverse
order.

```java
import java.util.Scanner;
import java.util.Arrays;
Public class all
{
```

```java
Public static void main (string args [])
{

    Scanner input = new Scanner (system. in);

    string name = input. next Line ();

    int len = name. length ();

    char arr [] = new char [len];

    string Alpha;

    for (int i=0; i < len; i++);

    }

        arr [i] = name. char At (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.

```java
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. Print ln (n1);

    }

}
```

40. Write a Program to Print hollow square Dollar Pattern?

```java
import java.util.Scanner:
Public class Square Dollar 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.Print ln ();
        }
    }
}
```