

DAY-17

04 July 2023 15:06

- WRITE A PROGRAM TO PRINT FIRST 10 FIBONACCI SERIES

0, 1, 1, 2, 3

N1 = 0 n1 = 1 n1 = 1 n1 = 2

N2 = 1 n2 = 1 n2 = 2 n2 = 3

N3 = 1 n3 = 2 n3 = 3 n3 = 5

N2 = n1

N3 = n2

```
class Test1
{
    public static void main(String[] args)
    {
        int n1 = 0, n2 = 1, n3, count = 10;

        for (int i = 0; i < count; i++)
        {
            n3 = n1 + n2;
            System.out.println(n3);

            n1 = n2;
            n2 = n3;
        }
    }
}
```

- WRITE A PROGRAM TO FIND THE FACTORIAL OF GIVEN NUMBER

Num = 3

1, 3

3! = 6

4! = 24

5! = 120

6! = 720

8! = 40,320

11! = 3,99,16,800

$$6! = 720$$

$$8! = 40,320$$

$$3! = 1*2*3 = 6$$

$$4! =$$

$$4! = 1*2*3*4 = 24$$

$$1*2*3*4$$

$$1*2 = a$$

$$a*3 = a$$

$$a*4 = a$$

```
class Test1
{
    public static void main(String[] args)
    {
        int num = 8;
        int factorial = 1;

        for (int i=1; i<=num; i++)
        {
            factorial = factorial*i;
        }
        System.out.println(factorial);
    }
}
```

WHILE LOOP

```
int i = 0;

while( i<=num)
{
    //code to executed
    i++;
}
```

- WRITE A PROGRAM TO PRINT -5 TO 5 BY USING WHILE LOOP

```
class Test1
{
```

```

public static void main(String[] args)
{
    int i = -5;
    int num = 5;

    while (i<=num)
    {
        System.out.println(i);
        i++;
    }
}

```

- WRITE A PROGRAM TO PRINT THE ODD NUMBERS BETWEEN 20 AND 100

```

class Test1
{
    public static void main(String[] args)
    {
        int i = 20;
        int num = 100;

        while (i<=num)
        {
            if (i%2 != 0)
            {
                System.out.println(i);
            }
            i++;
        }
    }
}

```

- WRITW A PROGRAM TO PRINT THE SUM OF THE RANGE 1 - 100

```

class Test1
{
    public static void main(String[] args)
    {
        int i = 1;
        int num = 100;
        int sum = 0;

        while (i<=num)
        {
            sum = sum+i;
            i++;
        }

        System.out.println("Sum of the 1-100 is "+ sum);
    }
}

```

```
    }  
}
```

- WRITE A PROGRAM TO FIND THE FACTORS OF A GIVEN NUMBER

```
class Test1  
{  
    public static void main(String[] args)  
    {  
        int i = 1;  
        int num = 45;  
  
        while (i<=num)  
        {  
            if (num%i == 0)  
            {  
                System.out.println(i);  
            }  
            i++;  
        }  
    }  
}
```