3. LOOPS

1.
 Program to print "Bright IT Career" ten times using for loop-

```
public class Excercise1
{
        public static void main(String[] args)
        {
         int i;
         for(i=1;i<=10;i++)
         System.out.println("Bright IT Career");
        }
}
```

Output-

Bright IT Career
Bright IT Career
Bright IT Career
Bright IT Career
Bright IT Career
Bright IT Career
Bright IT Career
Bright IT Career
Bright IT Career
Bright IT Career

2.
Program to print 1 to 20 numbers using the while loop-

```
public class Excercise2
{
        public static void main(String[] args)
        {
         int i=1;
         while(i<=20)
         {
           System.out.println(i);
           i++;
         }
        }
}
```

Output-

1
2
3
4
5

6
7
8
9
10
11
12
13
14
15
16
17
18
19
20

3.
Program to equal operator and not equal operators-

```java
public class  Exercise3
{
     public static void main(String[] args)
    {
        int a=1;
        int b=1;
        int c=2;
        if(a == b)
                System.out.println("Equal(1==1)");
        if(a != c)
                System.out.println("Not equal(1!=2)");
    }
}
```

Output -
Equal(1==1)
Not equal(1!=2)

4.
 Program to print the odd and even numbers-

```java
public class Exercise4
{
        public static void main(String[] args)
        {
         int i;
         Scanner sc = new Scanner(System.in);
         System.out.println("Enter the value: ");
         i=sc.nextInt();
         if(i%2==0)
         System.out.println("Even");
```

```
        else
            System.out.println("Odd");
          }
}
```

Output-
Enter the value: 5
Odd

5.
Program to print largest number among three numbers-

```java
import java.util.Scanner;
public class Exercise5
{
   public static void main(String[] args)
   {
       int x, y, z;
       Scanner s = new Scanner(System.in);
       System.out.print("Enter the first value:");
       x = s.nextInt();
       System.out.print("Enter the second value:");
       y = s.nextInt();
       System.out.print("Enter the third value:");
       z = s.nextInt();
       if(x > y && x > z)
       {
          System.out.println("Largest number is:"+x);
       }
       else if(y > z)
       {
          System.out.println("Largest number is:"+y);
       }
       else
       {
          System.out.println("Largest number is:"+z);
       }
   }
}
```

Output-
Enter the first value:3
Enter the second value:2
Enter the third value:5
Largest number is:5

6.
Program to print even number between 10 and 100 using while-

```java
import java.util.Scanner;
public class Exercise6
{
        public static void main(String[] args)
        {
           int i=10;
         while(i<=100)
         {
            if(i%2==0)
            System.out.println(i);
            i++;
         }
          }
}
```

Output-

7.
Program to print 1 to 10 using the do-while loop statement.

```java
import java.util.Scanner;
public class Exercise7
{
        public static void main(String[] args)
        {
           int i=1;
         do
         {
            System.out.println(i);
            i++;
         }while(i<=10);
        }
}
```

Output-
1
2
3
4
5
6
7
8
9
10

8.
 program to find Armstrong number or not

import java.util.Scanner;

```java
public class Exercise8
{
        public static void main(String[] args)
        {
            int i,a,c=0,temp;
            Scanner sc=new Scanner(System.in);
            System.out.println("Enter the number:");
            i=sc.nextInt();
            temp=i;
            while(i>0)
           {
                a=i%10;
                i=i/10;
                c=c+(a*a*a);
            }
          if(temp==c)
                System.out.println("armstrong number");
          else
                System.out.println("Not armstrong number");
        }
}
```

Output-
Enter the number: 371
armstrong number

9.
 Program to find the prime or not-

```java
import java.util.Scanner;
public class Exercise9
{
        public static void main(String[] args)
        {
           int n,i,c=0;
                Scanner sc = new Scanner(System.in);
                System.out.println("Enter a value : ");
                n = sc.nextInt();
                for(i=1;i<=n;i++)
                {
                        if(n%i==0)
                        {
                                c++;
                        }
                }
                if(c==2)

                System.out.println(n+" is a prime number");
                else
                        System.out.println(n+" is not a prime number");
        }
```

```
}
```

Output-
Enter a value :
3
3 is a prime number

10.
Program to find palindrome or not-

```java
import java.util.Scanner;
public class Exercise10
{
        public static void main(String[] args)
        {
                int n,r,rev=0,temp;
                Scanner sc = new Scanner(System.in);
                System.out.println("Enter the number:");
                n = sc.nextInt();
                temp=n;
                while(temp>0)
                {
                        r=temp%10;
                        rev=(rev*10)+r;
                        temp=temp/10;
                }
                if(rev==n)
                System.out.println(n+" is a Palindrome number ");
                else
                System.out.println(n+" is not a Palindrome number");
        }
}
```

Output-

Enter the number:121
121 is a Palindrome number

11.
Program to check whether a number is EVEN or ODD using switch-

```java
import java.util.Scanner;
public class Excercise11
{
        public static void main(String[] args)
        {
                int i;
                Scanner sc = new Scanner(System.in);
                        System.out.println("Enter the number:");
```

```
                i = sc.nextInt();
                switch(i%2)
                {
                        case 0:System.out.println("Even");
                                break;
                        case 1:System.out.println("Odd");
                }
        }
}
```

Output-
Enter the number:7
Odd

12.
Program to print gender (Male/Female) according to given M/F using switch-

```
import java.util.Scanner;
public class Excercise12
{
        public static void main(String[] args)
        {
          Scanner sc = new Scanner(System.in);
          System.out.println("Enter: ");
          char c = sc.next().charAt(0);
          switch(c)
         {
                case 'M':System.out.println("Male");
                        break;
                case 'F':System.out.println("Female");
                        break;
                default:System.out.println("Others");
         }
      }
}
```

Output-
Enter: F
Female

13.
Program for multiple if else statement(Largest number in 10,20 and 30)-

```
import java.util.Scanner;
public class Excercise13
{
        public static void main(String[] args)
        {
          int a=10,b=20,c=30;
          if(a>b && a>c)
          System.out.println("Largest number=10");
```

```java
        else if(b>a&& b>c)
          System.out.println("Largest number=20");
        else
        System.out.println("Largest number=30");
      }
}
```

Output-
Largest number=30