```java
package logicalprograms;

import java.util.Arrays;

public class CompareArrays {

	public static void main(String[] args)
	{

		int ar1[]= {10,20,30};
		int ar2[]= {40,90,30};
		int ar3[]= {10,20,30};

		System.out.println(Arrays.equals(ar1, ar2));

		System.out.println(Arrays.equals(ar1, ar3));

		System.out.println(Arrays.equals(ar3, ar2));
	}

}
```

```java
package logicalprograms;

import java.util.Scanner;

public class EvenOddNumber {

	public static void main(String[] args) {
		// num/2 rem-->0-->even

//		System.out.println(10%2);//0
//		System.out.println(10/2);//5

		Scanner sc= new Scanner(System.in);
		System.out.println("Enter a number");

		int a = sc.nextInt();


		if(a%2==0)
		{
			System.out.println("Given number is Even number");
		}

		else {
```

```
                System.out.println("Given number is Odd number");
            }

        }

}
```

```
package logicalprograms;

public class FactorialofNumber {

    public static void main(String[] args) {
        // 4!-->4*3*2*1=24

        int num=6;
        int num1=1;

        for(int i=num;i>=1;i--)//6,5,4,3,2,1
        {
            num1=num1*i;//6*1=6; 6*5=30; 4*30=120; 3*120=360; 2*360=720;
        }

        System.out.println("Factorial of number is "+num1);
    }

}
```

```
package logicalprograms;

public class MultiPlicationWithoutOperator {

    public static void main(String[] args) {

        //5*4
        //5+5+5+5
        int a=5;
        int b=4;
        int sum=0;
        for(int i=1;i<=4;i++)//1->2
        {
            sum=sum+a;//0+5->5;  5+5-->10
        }

        System.out.println("Multiplication is "+sum);

}
```

```
}
```

```
package logicalprograms;

public class NoOfWhiteSpaceInString {

	public static void main(String[] args) {
		String a=" P   U   N E";
		int count=0;

		for(int i=0;i<=a.length()-1;i++)
		{

			char myChar = a.charAt(i);
			if(myChar==' ')
			{
				count++;
			}
		}

		System.out.println("Number of white space in "+a+" is "+count);


	}

}
```

```
package logicalprograms;

import java.util.Scanner;

public class PalindromeString {

	public static void main(String[] args)
	{

		Scanner sc= new Scanner(System.in);
		System.out.println("Enter value of String");
		String a = sc.next();
		String b="";


		for(int i=a.length()-1;i>=0;i--)
		{
			b=b+a.charAt(i);
		}
```

```
		System.out.println("Original Sring is "+a);
		System.out.println("Reverse String is "+b);

		if(a.equals(b))
		{
			System.out.println("String is in Palindrome");
		}
		else {
			System.out.println("String is not in Palindrome");
		}
	}

}
```

```
package logicalprograms;

import java.util.Scanner;

public class ReverseString {

	public static void main(String[] args)
	{

		Scanner sc= new Scanner(System.in);
		System.out.println("Enter the String");
		String a = sc.next();//original string
		String b="";//blank string

		for(int i=a.length()-1;i>=0;i--)
		{

			b=b+a.charAt(i);
		}
		System.out.println("Original String is "+a);
		System.out.println("Reverse String is "+b);


	}

}
```

```
package logicalprograms;

import java.util.Scanner;

public class UserInput {
```

```
	public static void main(String[] args)
	{
		Scanner sc= new Scanner(System.in);

		System.out.println("Enter value of a");
		int a=sc.nextInt();


		System.out.println("Enter value of b");
		int b = sc.nextInt();

		int sum=a+b;
		System.out.println("Sum is "+sum);


	}

}
```