# Program 1

**Write a program to take command line input and check number is odd or even.**

**Code:**

```
import java.until.*;
Class evenOdd{
        Public static void main(String args[]){
                Int a;
                        Scanner s=new Scanner(System.in);
                    System.out.println(“Enter the number:”);
                a=s.nextInt();
                if (a%2==0){
                        System.out.println(“The number “+ a +” is Even.”);
                }
                else{
                        System.out.println(“The number “+ a +” is Odd.”);
                }
        }
}
```

Output:

```
D:\java\21BCA54>javac evenOdd.java

D:\java\21BCA54>java evenOdd
Enter the Number
7
The number 7 is Odd.

D:\java\21BCA54>
```

## Program 2

**Write a program to take command line input and sum of 2 number.**

**Code:**

```
import java.util.*;
class add{
	public static void main(String args[]){
		int a,b;
		Scanner s=new Scanner (system.in);
		System.out.println(“enter the first no:”);
		a=S.nextint();
		system.out.println(“enter the second no:”);
		b=s.nextint();
		System.out.println(“the sum of two numbers is :”+(a+b));
	}
}
```

Output:

```
D:\java\21BCA54>javac add.java

D:\java\21BCA54>java add
enter the first no:
10
enter the second no:
20
the sum of two numbers is :30

D:\java\21BCA54>
```

## Program 3

**Write a program to take command line input and calculate a Simple Interest.**

**Code:**

```
import java.util.*;
class SimpleIntrest{
        public static void main(String args[]){
                    Scanner s=new Scanner (System.in);
                    System.out.println("Enter the Principal balance:");
                    p=s.nextInt();
                    System.out.println("Enter the Rate of interst:");
                    r=s.nextInt();
                   System.out.println("Enter the the number of times interest
                compounds in a year :");
                    n=s.nextInt();
                  double result=((p*r*n)/100);
                  System.out.println("The Simple intrest is:"+ result);
        }
}
```

**Output:**

```
D:\java\21BCA54>javac SimpleIntrest.java

D:\java\21BCA54>java SimpleIntrest
Enter the Principal balance:
400
Enter the Rate of interst:
5
Enter the the number of times interest compounds in a year :
2
The Simple intrest is:40.0

D:\java\21BCA54>
```

## Program 4

**Write a Program to take command line input and Check Number is Positive or Negative.**

**Code:**

```
import java.util.*;
class positiveORnagative{
        public static void main(String args[]){
                int a;
                Scanner s=new Scanner (System.in);
                System.out.println("Enter the  no to check the number is positive or
negative:");
                n=s.nextInt();
                if (a<0){
                        System.out.println("The Number is Negative.");
                }
                else{
                        System.out.println("The Number is Positive.");
                }
        }
}
```

Output:

```
D:\java\21BCA54>javac positiveORnagative.java

D:\java\21BCA54>java positiveORnagative
Enter the  no to check the number is positive or negative:
-8
The Number is Negative.

D:\java\21BCA54>
```

## Program 5

**Write a Program to take command line input and Check Year is Leap Year or Not.**

**Code:**

```
import java.util.*;
class leapYear{
	public static void main(String args[]){
		int year;
		Scanner s=new Scanner (System.in);
		    System.out.println(“Enter the No of days:”);
		    a=s.nextInt();
		if(year % 400==0){
			System.out.println(year+” is a Leap Year.”);
		}
		else if(year % 100==0){
			System.out.println(year+” is not a Leap Year.”);
		}
		else if(year % 4==0){
			System.out.println(year+” is a Leap Year.”);
		}
		else{
			System.out.println(year+” is not a Leap Year.”);
		}
	}
}
```

**Output:**

```
D:\java\21BCA54>javac leapYear.java

D:\java\21BCA54>java leapYear
Enter the No of days:
364
364 is a Leap Year.

D:\java\21BCA54>
```

## Program 6

**Write a program to take command line input and find the Character Is Vowel or Not.**

**Code:**

```
import java.util.*;
class WovelORnot{
	public static void main(String args[]){
		Scanner s=new Scanner(System.in);
		System.out.println("Enter any character:");
		char c;
		c=s.next().charAt(0);

	if(c=='a'||c=='A'||c=='e'||c=='E'||c=='i'||c=='I'||c=='o'||c=='O'||c=='u'||c=='U'){
			System.out.println("The "+c+" is Vovel.");
		}
		else{
			System.out.println("The "+c+" is Vovel.");
		}
	}
}
```

**Output:**

```
D:\java\21BCA54>javac WovelORnot.java

D:\java\21BCA54>java WovelORnot
Enter any character:
I
The I is Vovel.

D:\java\21BCA54>
```

## Program 7

**Write a program to reverse a given number using while loop.**

**Code:**

```
import java.util.*;
class reverseWhile{
	public static void main(String args[]){
		int a,n,b=0;
		Scanner s=new Scanner(System.in);
		System.out.println("Enter the Number:");
		a=s.nextInt();
		int i=a;
		while(a!=0){
			N=a%10;
			B=b*10+n;
			A=a/10;
		}
		System.out.println(b);
	}

}
```

**Output:**

```
D:\java\21BCA54>javac reverseWhile.java

D:\java\21BCA54>java reverseWhile
Enter the Number:
123456
654321

D:\java\21BCA54>
```

## Program 8

**Write a program to reverse a given number using for loop.**

**Code:**

```
import java.util.*;
class reverseFor{

        public static void main(String args[]){
                int a,n,b=0;
                Scanner s=new Scanner(System.in);
                System.out.println("Enter the Number:");
                a=s.nextInt();
                for(int i=0;a!=0;i++){
                        N=a%10;
                        B=b*10+n;
                        A=a/10;
                }
                System.out.println(b);
        }
}
```

**Output:**

```
D:\java\21BCA54>javac reverseFor.java

D:\java\21BCA54>java reverseFor
Enter the Number:
654321
123456

D:\java\21BCA54>
```

## Program 9

**Write a program to check number is Armstrong or Not.**

```
Import java.util.*;
class Armstrong{

        Public static void main(String args[]){
                Scanner s=new Scanner(System.in);
              System.out.println("Enter the Number:");
              A=s.nextInt();
              Int r,re=0;

              Int o=n;

              For(int i=n;i!=0;i++){

                      R=n % 10;

                      Re=(r*r*r);

                      N=(n/10);

              }

              If(re==n)

                      System.out.println(o+" is an Armstrong Number.");

              Else

                      System.out.println(o+" is not an Armstrong Number.");

        }

}
```

**Output:**

```
D:\java\21BCA54>javac Armstrong.java

D:\java\21BCA54>java Armstrong
Enter the number:
353
353 is an Armstrong Number.

D:\java\21BCA54>
```

## Program 10

**Write a to check number is Prime number or not.**

```
Import java.util.*;
Class primeNo{

        Public static void main(String args[]){

                Int m=0,f=0,a;
                Scanner s=new Scanner(System.in);
                System.out.println("Enter the Number:");

                A=s.nextInt();
                M=a/2;
                If(a==0||a==1){
                        System.out.println(a+" is not prime number.");
                }

                Else{

                        For(int i=2;i<=m;i++){

                                If(a%i==0){
                                        System.out.println(a+" is not prime
number.");

                                        F=1;

                                        break;
```

```
                    }
                }
                If(f==0){
                    System.out.println(a+" is  prime number.");
                }
            }
        }
}
```

**Output:**

```
D:\java\21BCA54>javac primeNo.java

D:\java\21BCA54>java primeNo
Enter the number:
30
30 is not prime number.

D:\java\21BCA54>
```

## Program 11

**Write a program to check given string is Palindrome or not**

**Code:**

```
import java.util.*;
class PalindromeString{
	public static void main(String args[]){
		Scanner s=new Scanner(System.in);
		String r="";
		System.out.println("Enter the String:");
		String Name=s.next();
		int a=Name.length();
		for(int i=(a-1);i>=0;--i){
			r=r+Name.charAt(i);
		}
		if (Name.toLowerCase().equals(r.toLowerCase())){
			System.out.println("String is palindrome.");
		}
		else{
			System.out.println("String not is palindrome.");
		}
	}
}
```

**Output:**

```
D:\java\21BCA54>javac PalindromeString.java

D:\java\21BCA54>java PalindromeString
Enter the String:
Naman
String is palindrome.

D:\java\21BCA54>
```

## Program 12

**Write a program in java to display the pattern like right angle triangle using an asterisk.**

```
*
**
***
****
*****
```

```
import java.util.*;
class pattern{
	public static void main(String args[]){
		int a;
		Scanner s=new Scanner(System.in);
		System.out.println("Enter number to Print pattern until You want to print:");
		a=s.nextInt();

		for(int i=0;i<a;i++)
		{
			for(int j=0;j<i;j++)
			{
				System.out.print("*");
			}
			System.out.println();
		}

	}

}
```

**Output:**

```
D:\java\21BCA54>javac pattern.java

D:\java\21BCA54>java pattern
Enter number to Print pattern until You want to print:
6

*
**
***
****
*****

D:\java\21BCA54>
```

## Program 13

**Write a program in java to make such a pattern like a pyramid with numbers increased by 1.**

**1**
**2 3**
**4 5 6**
**7 8 9 10**

```
import java.util.*;
class NumPattern{
	public static void main(String args[]){
		int a;
		Scanner s=new Scanner(System.in);
		System.out.println("Enter number to Print pattern until You want to print:");
		a=s.nextInt();
		int m=a;
		int n=1;
		for(int i=0;i<a;i++)
		{
			for(int j=0;j<m-1;j++)
			{
				System.out.print(" ");
			}
			for(int k=1;k<=2*i-1;k+=2){

				System.out.print(n+" ");
				n++;
			}
			m--;
			System.out.println();
		}

	}

}
```

**Output:**

```
D:\java\21BCA54>javac NumPattern.java

D:\java\21BCA54>java NumPattern
Enter number to Print pattern until You want to print:
6

    1
   2 3
  4 5 6
 7 8 9 10
11 12 13 14 15

D:\java\21BCA54>
```

## Program 14

**Write a C Program to display the pattern using the alphabet.**

**A B C D E**
**A B C D**
**A B C**
**A B**
**A**

```
import java.util.*;
class AbcPattern{
	public static void main(String args[]){
		int a;
		Scanner s=new Scanner(System.in);
		System.out.println("Enter number to Print pattern until You want
to print:");
		a=s.nextInt();
		for(int i=0;i<a;i++)
		{
			for(int j=i,p='A';j<a;j++,p++)
			{
				System.out.print((char)p);
			}
			System.out.println();
		}
	}
}
```

**Output:**

```
D:\java\21BCA54>javac AbcPattern.java

D:\java\21BCA54>java AbcPattern
Enter number to Print pattern until You want to print:
6
A B C D E
A B C D
A B C
A B
A


D:\java\21BCA54>
```

## Program 15

**Write a program to take command line input and print factorial of given number.**

```
//factriol=4!
Import java.util.*;
class factorial{
        public static void main(String args[]){
            Scanner s=new Scanner(System.in);
            System.out.println(“Enter the Number:”);
            int a=s.nextInt();
                int c=1;
                for(int i=a;i>=1;--i){
                        c=c*i;
                }
                System.out.println("The Factorial of  is:"+c);
        }
}
```

**Output:**

```
D:\java\21BCA54>javac factorial.java

D:\java\21BCA54>java factorial
Enter the num to check factorial or not:
5
The Factorial of  is:120

D:\java\21BCA54>
```

## Program 16

**Write a program to display Fibonacci series.**

```
class fibonaccisirise{
        public static void main(String args[]){
                int n,next=0;
                 s=new Scanner(System.in);
                System.out.println(“Enter the Number:”);
                n=s.nextInt();
                int f=0,s=1;
                System.out.println("Fibonacci Series till "+n+" terms:");
                for(int i=1;i<=n;++i){
                        System.out.println(f+",\n ");
                        next=f+s;
                        f=s;
                        s=next;
                        if(f>n){
                                break;
                        }
                }
        }
 }
```

**Output:**

```
D:\java\21BCA54>javac fibonaccisirise.java

D:\java\21BCA54>java fibonaccisirise
Enter the num:
8
Fibonacci Series till 8 terms:0, 1, 1, 2, 3, 5, 8,
D:\java\21BCA54>
```