01|..Java Program to Print an Integer (Entered by the User)

```
 import java.util.Scanner;


public class printAnInteger {
   public static void main (String args[]){


        Scanner scan=new Scanner(System.in);


       System.out.print("Enter the number: ");


       int num=scan.nextInt();


       System.out.print("You entered : "+num);
   }
}
```

"C:\Program Files\Java\jdk-18.0.2\bin\java.exe" "-javaagent:C:\Program Files\JetBrains\IntelliJ IDEA 2022.2\lib\idea_rt.jar=59337:C:\Program Files\JetBrains\IntelliJ IDEA 2022.2\bin" -Dfile.encoding=UTF-8 -classpath C:\Users\Admin\IdeaProjects\untitled1\out\production\untitled1 printAnInteger

Enter the number: 223

You entered : 223

Process finished with exit code 0

02|..Java Program to Add Two Integers

```
public class Addtwonumbers {
    public static void main(String[]args){
        System.out.println("enter two integers numbers");
        int first= 26;
        int second = 34;
System.out.println(first+"  "+second);
        int sum= first +second;


        System.out.println("the sum is :"+sum );


    }
}
```

```
"C:\Program Files\Java\jdk-18.0.2\bin\java.exe" "-javaagent:C:\Program Files\JetBrains\IntelliJ IDEA 2022.2\lib\idea_rt.jar=59021:C:\Program Files\JetBrains\IntelliJ IDEA 2022.2\bin" -Dfile.encoding=UTF-8 -classpath C:\Users\Admin\IdeaProjects\untitled1\out\production\untitled1 Addtwonumbers
enter two integers numbers
26  34
the sum is :60


Process finished with exit code 0
```

03|..Java Program to Multiply two Floating Point Numbers

```
public class MultiplyTwoNumbers {
    public static void main(String []args){
        float first =2.5f;
        float second =4.7f;
        float product= first*second;
        System.out.println("the product is :"+product);
    }
}
```

```
"C:\Program Files\Java\jdk-18.0.2\bin\java.exe" "-javaagent:C:\Program Files\JetBrains\IntelliJ IDEA 2022.2\lib\idea_rt.jar=59934:C:\Program Files\JetBrains\IntelliJ IDEA 2022.2\bin" -Dfile.encoding=UTF-8 -classpath C:\Users\Admin\IdeaProjects\untitled3\out\production\untitled3 MultiplyTwoNumbers
the product is :11.75

Process finished with exit code 0
```

04|.. Java Program to Find ASCII Value of a character

```
public class AsciiValue {
    public static void main(String[] args) {

        char ch = 'a';
        int omi = ch;
        int khalad = (int) ch;
        System.out.println("The ASCII value of " + ch + " is: " +omi);
        System.out.println("The ASCII value of " + ch + " is: " + khalad);
    }
}
```

```
"C:\Program Files\Java\jdk-18.0.2\bin\java.exe" "-javaagent:C:\Program Files\JetBrains\IntelliJ IDEA 2022.2\lib\idea_rt.jar=60566:C:\Program Files\JetBrains\IntelliJ IDEA 2022.2\bin" -Dfile.encoding=UTF-8 -classpath C:\Users\Admin\IdeaProjects\untitled4\out\production\untitled4 AsciiValue
The ASCII value of a is: 97
The ASCII value of a is: 97

Process finished with exit code 0
```

05|..Java Program to Compute Quotient and Remainder

```
public class QuotientRemainder {
    public static void main(String[] args) {

        int dividend = 55, divisor = 6;

        int quotient = dividend / divisor;
        int remainder = dividend % divisor;

        System.out.println("Quotient = " + quotient);
        System.out.println("Remainder = " + remainder);
    }
}
```

```
"C:\Program Files\Java\jdk-18.0.2\bin\java.exe" "-javaagent:C:\Program Files\JetBrains\IntelliJ IDEA 2022.2\lib\idea_rt.jar=60993:C:\Program Files\JetBrains\IntelliJ IDEA 2022.2\bin" -Dfile.encoding=UTF-8 -classpath C:\Users\Admin\IdeaProjects\untitled5\out\production\untitled5 QuotientRemainder
Quotient = 9
Remainder = 1

Process finished with exit code 0
```

06.1|..Java Program to Swap Two Numbers with third variable

```
package org.learn;


import java.util.Scanner;
public class SwapNumbers {
    public static void main(String[] args) {
        try (Scanner scanner = new Scanner(System.in)) {


            System.out.printf("1. Enter first number : ");
            int x = scanner.nextInt();
           System.out.printf("2. Enter second number : ");
            int y = scanner.nextInt();
          System.out.printf("3. Numbers before swapping: x = %d, y = %d \n", x, y);
           int temp = x;
            x = y;
            y = temp;
            System.out.printf("4. Numbers after swapping: x = %d, y = %d \n", x, y);
    }
    }
}
```

```
"C:\Program Files\Java\jdk-18.0.2\bin\java.exe" "-javaagent:C:\Program Files\JetBrains\IntelliJ IDEA 2022.2\lib\idea_rt.jar=61496:C:\Program Files\JetBrains\IntelliJ IDEA 2022.2\bin" -Dfile.encoding=UTF-8 -classpath C:\Users\Admin\IdeaProjects\untitled6\out\production\untitled6 org.learn.SwapNumbers
1. Enter first number : 245
2. Enter second number : 300
3. Numbers before swapping: x = 245, y = 300
4. Numbers after swapping: x = 300, y = 245


Process finished with exit code 0
```

06.02|,,Java Program to Swap Two Numbers without third variable

```
public class SwapNumbers {
    public static void main(String[] args) {
 float first = 369.9f, second =304.5f;
System.out.println("--Before swap--");
   System.out.println("First number = " +first);
   System.out.println("Second number = " +second);
  first = first - second;
   second = first + second;
   first = second - first;
System.out.println("--After swap--");
   System.out.println("First number = " + first);
   System.out.println("Second number = " + second);

   }
}
```

```
"C:\Program Files\Java\jdk-18.0.2\bin\java.exe" "-javaagent:C:\Program Files\JetBrains\IntelliJ IDEA 2022.2\lib\idea_rt.jar=53218:C:\Program Files\JetBrains\IntelliJ IDEA 2022.2\bin" -Dfile.encoding=UTF-8 -classpath C:\Users\Admin\IdeaProjects\untitled7\out\production\untitled7 SwapNumbers
--Before swap--
First number = 369.9
Second number = 304.5
--After swap--
First number = 304.5
Second number = 369.9
Process finished with exit code 0
```

07 |..Java Program to Check Whether a Number is Even or Odd

```
import java.util.Scanner;
public class EvenOdd {
    public static void main(String[] args) {
 Scanner reader = new Scanner(System.in);
  System.out.print("Enter a number: ");
        int num = reader.nextInt();
        if(num % 2 == 0)
            System.out.println(num + " is even");
        else
            System.out.println(num + " is odd");
    }
}
```

```
"C:\Program Files\Java\jdk-18.0.2\bin\java.exe" "-javaagent:C:\Program Files\JetBrains\IntelliJ IDEA 2022.2\lib\idea_rt.jar=63235:C:\Program Files\JetBrains\IntelliJ IDEA 2022.2\bin" -Dfile.encoding=UTF-8 -classpath C:\Users\Admin\IdeaProjects\untitled8\out\production\untitled8 EvenOdd
Enter a number: 40
40 is even
Process finished with exit code 0
```

```
"C:\Program Files\Java\jdk-18.0.2\bin\java.exe" "-javaagent:C:\Program Files\JetBrains\IntelliJ IDEA 2022.2\lib\idea_rt.jar=63293:C:\Program Files\JetBrains\IntelliJ IDEA 2022.2\bin" -Dfile.encoding=UTF-8 -classpath C:\Users\Admin\IdeaProjects\untitled8\out\production\untitled8 EvenOdd
Enter a number: 41
41 is odd


Process finished with exit code 0
```

8|..Java Program to Check Whether an Alphabet is Vowel or Consonant

```
import java.util.*;
import java.util.Scanner;


public class VowelConsonant {
  public static void main(String[] args) {
   char Y;
       Scanner input = new Scanner(System.in);
Y=(char) input.next().charAt(0);
       if(Y == 'a' || Y == 'e' ||Y == 'i' || Y == 'o' ||Y == 'u'||Y == 'A' || Y == 'E' ||Y== 'I' ||Y == 'O' || Y == 'U'
)
          System.out.println(Y + " is vowel");
       else
          System.out.println(Y + " is consonant");
 }
}
```

"C:\Program Files\Java\jdk-18.0.2\bin\java.exe" "-javaagent:C:\Program Files\JetBrains\IntelliJ IDEA 2022.2\lib\idea_rt.jar=63856:C:\Program Files\JetBrains\IntelliJ IDEA 2022.2\bin" -Dfile.encoding=UTF-8 -classpath C:\Users\Admin\IdeaProjects\untitled9\out\production\untitled9 VowelConsonant

y

y is consonant

Process finished with exit code 0

"C:\Program Files\Java\jdk-18.0.2\bin\java.exe" "-javaagent:C:\Program Files\JetBrains\IntelliJ IDEA 2022.2\lib\idea_rt.jar=63995:C:\Program Files\JetBrains\IntelliJ IDEA 2022.2\bin" -Dfile.encoding=UTF-8 -classpath C:\Users\Admin\IdeaProjects\untitled9\out\production\untitled9 VowelConsonant

i

i is vowel

Process finished with exit code 0

9|..Java Program to Find the Largest Among Three Numbers

```
import java.util.Scanner;
public class LargestNumber {
   public static void main(String[] args)
   {
      int o, m, i, largest, temp;

      Scanner sc = new Scanner(System.in);

      System.out.println("Enter the first number:");
      o = sc.nextInt();
      System.out.println("Enter the second number:");
      m = sc.nextInt();
      System.out.println("Enter the third number:");
      i = sc.nextInt();

      temp=o>m?o:m;

      largest=i>temp?i:temp;

      System.out.println("The largest number is: "+largest);
   }
}
```

"C:\Program Files\Java\jdk-18.0.2\bin\java.exe" "-javaagent:C:\Program Files\JetBrains\IntelliJ IDEA 2022.2\lib\idea_rt.jar=63599:C:\Program Files\JetBrains\IntelliJ IDEA 2022.2\bin" -Dfile.encoding=UTF-8 -classpath C:\Users\Admin\IdeaProjects\untitled10\out\production\untitled10 LargestNumber

Enter the first number:

50

Enter the second number:

60

Enter the third number:

70

The largest number is: 70

Process finished with exit code 0

10|..Java Program to Find all Roots of a Quadratic Equation

```
public class Root {
   public static void main(String[] args) {


      double a = 4.3, b = 8, c = 10.6;
      double root1, root2;


      double determinant = b * b - 4 * a * c;


      if (determinant > 0) {


         root1 = (-b + Math.sqrt(determinant)) / (2 * a);
         root2 = (-b - Math.sqrt(determinant)) / (2 * a);


         System.out.format("root1 = %.2f and root2 = %.2f", root1, root2);
      }
```

```
        else if (determinant == 0) {

            root1 = root2 = -b / (2 * a);
            System.out.format("root1 = root2 = %.2f;", root1);
        }


        else {


            double real = -b / (2 * a);
            double imaginary = Math.sqrt(-determinant) / (2 * a);
            System.out.format("root1 = %.2f+%.2fi", real, imaginary);
            System.out.format("\nroot2 = %.2f-%.2fi", real, imaginary);
        }
    }
}
```

```
"C:\Program Files\Java\jdk-18.0.2\bin\java.exe" "-javaagent:C:\Program Files\JetBrains\IntelliJ IDEA 2022.2\lib\idea_rt.jar=51862:C:\Program Files\JetBrains\IntelliJ IDEA 2022.2\bin" -Dfile.encoding=UTF-8 -classpath C:\Users\Admin\IdeaProjects\untitled11\out\production\untitled11 Root
root1 = -0.93+1.26i
root2 = -0.93-1.26i
Process finished with exit code 0
```

11|..Java program to check leap year

```
import java.util.Scanner;
public class Leap {
   public static void main(String[] args)
   {

      int year;



      Scanner scn = new Scanner(System.in);
      year = scn.nextInt();



      if ((year % 400 == 0)
            || ((year % 4 == 0) && (year % 100 != 0))) {

         System.out.println(year + " : Leap Year");
      }

      else {

         System.out.println(year + " : Non - Leap Year");
      }
   }
}
```

"C:\Program Files\Java\jdk-18.0.2\bin\java.exe" "-javaagent:C:\Program Files\JetBrains\IntelliJ IDEA 2022.2\lib\idea_rt.jar=60304:C:\Program Files\JetBrains\IntelliJ IDEA 2022.2\bin" -Dfile.encoding=UTF-8 -classpath C:\Users\Admin\IdeaProjects\untitled12\out\production\untitled12 Leap

2014

2014 : Non - Leap Year

Process finished with exit code 0

12|..Java Program to Check Whether a Number is Positive or Negative

```
import java.util.Scanner;
public class PositiveOrNegative {

   public static void main(String[] args)
   {
      int num;

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

      num = sc.nextInt();

      if(num>0)
      {
         System.out.println("The number is positive.");
```

```
        }

        else if(num<0)
        {
            System.out.println("The number is negative.");
        }

        else
        {
            System.out.println("The number is zero.");
        }
    }
}
```

```
"C:\Program Files\Java\jdk-18.0.2\bin\java.exe" "-javaagent:C:\Program Files\JetBrains\IntelliJ IDEA 2022.2\lib\idea_rt.jar=55243:C:\Program Files\JetBrains\IntelliJ IDEA 2022.2\bin" -Dfile.encoding=UTF-8 -classpath C:\Users\Admin\IdeaProjects\untitled13\out\production\untitled13 PositiveOrNegative
Enter a number: -33
The number is negative.

Process finished with exit code 0
```

```
"C:\Program Files\Java\jdk-18.0.2\bin\java.exe" "-javaagent:C:\Program Files\JetBrains\IntelliJ IDEA 2022.2\lib\idea_rt.jar=55294:C:\Program Files\JetBrains\IntelliJ IDEA 2022.2\bin" -Dfile.encoding=UTF-8 -classpath C:\Users\Admin\IdeaProjects\untitled13\out\production\untitled13 PositiveOrNegative
Enter a number: 22
The number is positive.

Process finished with exit code 0
```

13|..Java Program to Check Whether a Character is Alphabet or Not

```
import java.util.Scanner;
public class Alphabet {
   private static Scanner sc;

   public static void main(String[] args) {

      char ch;
      sc= new Scanner(System.in);

      System.out.print("Please Enter any Character =  ");
      ch = sc.next().charAt(0);

      if((ch >= 'a' && ch <= 'z') || (ch >= 'A' && ch <= 'Z')) {
         System.out.println(ch + " is an Alphabet");
      }
      else {
         System.out.println(ch + " is Not an Alphabet");
      }

   }
}
```

```
"C:\Program Files\Java\jdk-18.0.2\bin\java.exe" "-javaagent:C:\Program Files\JetBrains\IntelliJ IDEA 2022.2\lib\idea_rt.jar=56117:C:\Program Files\JetBrains\IntelliJ IDEA 2022.2\bin" -Dfile.encoding=UTF-8 -classpath C:\Users\Admin\IdeaProjects\untitled14\out\production\untitled14 Alphabet
Please Enter any Character =  m
m is an Alphabet
Process finished with exit code 0
```