23BAI1035-BCSE103E-Java

GitHub Link: https://github.com/Nity05/Java-Sub.git

Date: 16-07-2024

1.Printing Text

Code:

```java
public class Print{
    public static void main(String[] args){
        System.out.println("Hello World!");
    }
}
```

Output:

```
PS C:\Nithish\College\coding\java> javac Print.java
PS C:\Nithish\College\coding\java> java Print
Hello World!
```
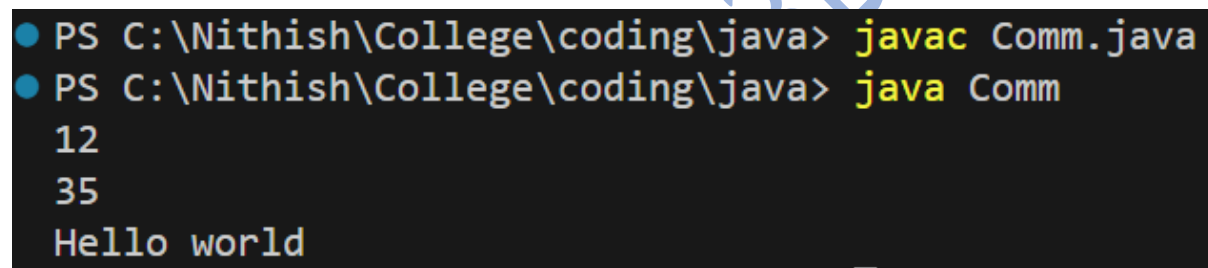
2.Using Comments

Code

```java
public class Comm{
    public static void main(String[] args){
        final int a=12;
        int b=10;
        b+=25;
        //This is a single line comment

        /*This comment can be of multi line
```

```
        Line 1

        Line 2

     */

    String s="Hello world";

    System.out.println(a);

    System.out.println(b);

    System.out.println(s);

  }

}
```

Output:

```
● PS C:\Nithish\College\coding\java> javac Comm.java
● PS C:\Nithish\College\coding\java> java Comm
  12
  35
  Hello world
```

3.Variables

Code:

```
public class Var {

    public static void main(String[] args){
        final int a=12;

        int b=10;

        b+=25;

        String s="Hello world";

        System.out.println(a);

        System.out.println(b);

        System.out.println(s);
```

```
        }
    }
```

Output

```
PS C:\Nithish\College\coding\java\Java-Sub\Day1> javac Var.java
PS C:\Nithish\College\coding\java\Java-Sub\Day1> java Var
12
35
Hello world
```

Date: 18-07-2024

GitHub Link: https://github.com/Nity05/Java-Sub.git

1.Integer to Double

Code;

```
public class E2{
    public static void main(String[] args){
    int myInt=9;
    double myDouble=myInt;
    System.out.println(myDouble);
    System.out.println(myInt);
    }
    }
```

Ouput:

```
PS C:\Nithish\College\coding\java> javac E2.java
PS C:\Nithish\College\coding\java> java E2
9.0
9
```

2.Double to Integer

Code:

```
public class Ex2{
public static void main(String[] args){
double myDouble=9.78d;
int myInt=(int)myDouble;
System.out.println(myDouble);
```

```
System.out.println(myInt);
}
}
```

Output:

```
C:\1035>java Ex2
9.78
9
```

3.**String Concatenation**

Code:

```
public class Ex4{
public static void main(String[] args){
int n=100;
String s="Hi";
String sum=s+n;
System.out.println(sum);
}
}
```

Output:

```
C:\1035>java Ex4
Hi100
```

4.**Ternary Operator**

Code:

```
public class Ex5{
public static void main(String[] args){
int x,y;
x=20;
```

```java
y=(x==1)?78:45;

System.out.println(y);

y=(x==20)?78:45;

System.out.println(y);

}

}
```

Output:

```
C:\1035>java Ex5
45
78
```

5.Length operator

Code:

```java
public class Ex6{

public static void main(String[] args){

String s="Nithish Kumar";

System.out.println("The length of the s string is: "+s.length());

}

}
```

Output:

```
C:\1035>java Ex6
The length of the s string is: 13
```

6.Case Conversion

Code:

```java
public class Ex7{

public static void main(String[] args){

String s="AbCdEfg";

System.out.println( s.toUpperCase());

System.out.println(s.toLowerCase());
```

```
}

}
```

Output:

```
C:\1035>java Ex7
ABCDEFG
abcdefg
```

7.Search

Code:

```
public class Ex8{

public static void main(String[] args){

String s="AbCdEfg";

System.out.println(s.indexOf("CdE"));

}

}
```

Output:

```
C:\1035>java Ex8
2
```

1.Concantenation-1

Code:

```
public class ep1{

public static void main(String args[]){

String firstName="John";

String lastname="Smith";

System.out.println(firstName+" "+lastname);

}

}
```

Output

```
C:\Nithish\College\coding\java>java ep1
John Smith
```

2.Concantenation-2

Code:

```
public class con{

    public static void main(String args[]){

    String firstName="John";

    String lastname="Smith";

    System.out.println(firstName.concat(lastname));

    }

    }
```

Output:

```
PS C:\Nithish\College\coding\java> javac con.java
PS C:\Nithish\College\coding\java> java con
JohnSmith
```

3.Concantenation-3

Code

```
public class ep2{

public static void main(String args[]){

String x="10";

int y=20;

String z=x+y;

System.out.println(z);

}

}
```

Output

```
C:\Nithish\College\coding\java>java ep2
1020
```

4.Escape sequemce

Code

```
public class ep3{

public static void main(String args[]){

String txt="We are the so-called \"Vikings\" from the north";

System.out.println(txt);

}

}
```

Output

```
C:\Nithish\College\coding\java>java ep3
We are the so-called "Vikings" from the north
```

5.Max function

Code

public class ep4{

public static void main(String args[]){

System.out.println(Math.max(200000,90));

}

}

Output

```
C:\Nithish\College\coding\java>java ep4
200000
```

6.Min function

Code

public class ep5{

public static void main(String args[]){

System.out.println(Math.min(200000,90));

}

}

Output

```
C:\Nithish\College\coding\java>java ep5
90
```

7.Square Root

Code

```java
public class ep6{

public static void main(String args[]){

System.out.println(Math.sqrt(2));

}

}
```

Output

```
C:\Nithish\College\coding\java>java ep6
1.4142135623730951
```

8.Absolute Function

Code

```java
public class ep7{

public static void main(String args[]){

System.out.println(Math.abs(-5.89));

}

}
```

Output

```
C:\Nithish\College\coding\java>java ep7
5.89
```

9.Random function

Code

```java
public class ep8{

public static void main(String args[]){

System.out.println(Math.random());

}
```

}

Output

```
C:\Nithish\College\coding\java>java ep8
0.026097557338222388
```

1. Boolean

Code:

```java
public class ep9{
    public static void main(String[] args){
        boolean isJavaFun=true;
        boolean isFishTasty=false;
        System.out.println(isJavaFun);
        System.out.println(isFishTasty);
    }
}
```

Output:

```
PS C:\Nithish\College\coding\java> javac ep9.java
PS C:\Nithish\College\coding\java> java ep9
true
false
```

2.Comparision

Code:

```java
public class ep10{
    public static void main(String[] args){
        int x=10;
        int y=9;
        System.out.println(x>y);
```

```
    }
}
```



```
PS C:\Nithish\College\coding\java> java ep10
true
```

3.Comparision

Code:

```java
public class ep11{
    public static void main(String[] args){


        System.out.println(10==15);
    }
}
```

Output


```
PS C:\Nithish\College\coding\java> java ep11
false
```

4.If condition

Code:

```java
public class ep11{
    public static void main(String[] args){
        if(20>18){

        System.out.println("20 is greater than 18");}
    }
}
```

Output

```
PS C:\Nithish\College\coding\java> java ep11
20 is greater than 18
```

4.If-Else

Code

```java
public class ep111{
    public static void main(String[] args){
        int time=20;
        if(time<18){

            System.out.println("Good day");}
        else{
            System.out.println("Good evening");
        }
    }
}
```

Output

```
PS C:\Nithish\College\coding\java> java ep11
Good evening
```

5.If-Else if-Else

Code:

```java
public class ep11{
    public static void main(String[] args){
        int time=22;
        if(time<10){

            System.out.println("Good morning");}
        else if(time<20){
            System.out.println("Good day");
```

```java
        }
        else{
            System.out.println("Good evening");
        }
    }
}
```

Output

```
PS C:\Nithish\College\coding\java> java ep11
Good evening
```

6.Switchcase

Code

```java
public class ep12{
    public static void main(String[] args){
        int day=4;
        switch (day) {
            case 1:
                System.out.println("Monday");
                break;
            case 2:
                System.out.println("Tuesday");
                break;
            case 3:
                System.out.println("Wednesday");
                break;
            case 4:
                System.out.println("Thursday");
                break;
```

```java
        case 5:
            System.out.println("Friday");
            break;
        case 6:
            System.out.println("Saturday");
            break;
        case 7:
            System.out.println("Sunday");
            break;
        default:
            System.out.println("Wrong input");
        }
    }
}
```

Output

```
PS C:\Nithish\College\coding\java> java ep12
Thursday
```

7.While

Code:

```java
public class ep13{
    public static void main(String[] args){
        int i=0;
        while(i<5){
            System.out.println(i);
            i++;
        }
    }
```

}

Output

```
PS C:\Nithish\College\coding\java> java ep13
0
1
2
3
4
```

8.Do While

Code

```java
public class dow{
    public static void main(String[] args){
        int i=0;
        do{
            System.out.println(i);
            i++;
        }
        while(i<5);
    }
}
```

Output

```
● PS C:\Nithish\College\coding\java> javac dow.java
● PS C:\Nithish\College\coding\java> java dow
  0
  1
  2
  3
  4
```
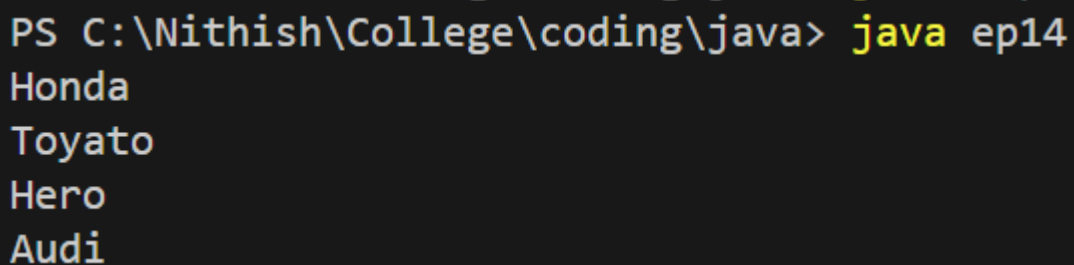
9.For-Each

Code:

```java
public class ep14{
    public static void main(String[] args){
        String[] cars={"Honda","Toyato","Hero","Audi"};
        for(String i:cars){
            System.out.println(i);
        }
    }
}
```

Output

```
PS C:\Nithish\College\coding\java> java ep14
Honda
Toyato
Hero
Audi
```

public

10.Break

Code:

```java
class ep15{
    public static void main(String[] args){
        for(int i=0;i<7;i++){
            if(i==5){
                break;
            }
            System.out.println(i);
        }
    }
}
```

Output:

```
PS C:\Nithish\College\coding\java> java ep15
0
1
2
3
4
```

11.For Loop

Code:

```
public class for1{
    public static void main(String[] args){
        for(int i=0;i<7;i++){
            System.out.println(i);
        }
    }
}
```

Output

```
PS C:\Nithish\College\coding\java> javac for1.java
PS C:\Nithish\College\coding\java> java for1
0
1
2
3
4
5
6
```

12.Continue:

Code:
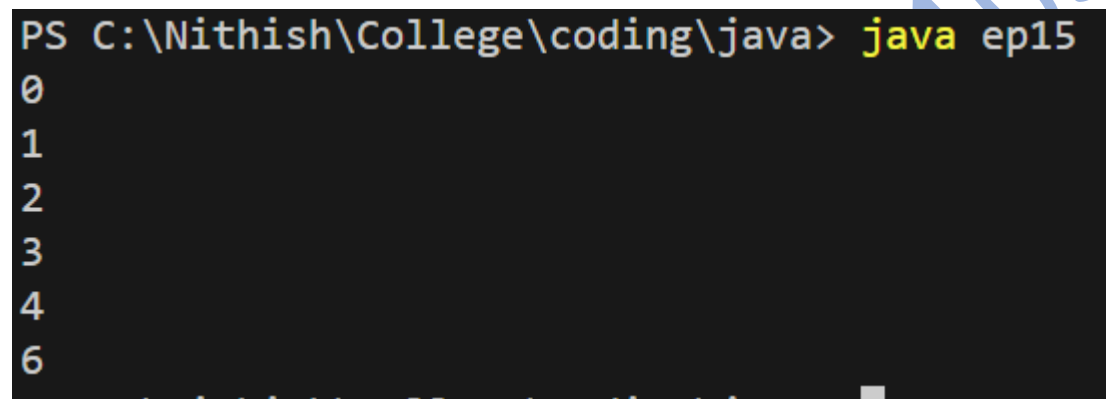
```
public class ep15{
    public static void main(String[] args){
        for(int i=0;i<7;i++){
```

```
        if(i==5){
            continue;
        }
        System.out.println(i);
    }
  }
}
```

Output

```
PS C:\Nithish\College\coding\java> java ep15
0
1
2
3
4
6
```

13.Getting input

Code:

```
import  java.util.Scanner;
public class ep16{
    public static void main(String[] args){
        Scanner myObj=new Scanner(System.in);
        String username;
        System.out.println("Enter your username: ");
        username=myObj.nextLine();
        System.out.println("Your username is: "+username);
    }
}
```

Output

```
PS C:\Nithish\College\coding\java> java ep16
Enter your username:
Nithish
Your username is: Nithish
```

1.Array to String

Code:

```java
public class StringDemo{
    public static void main(String args[]){
        char[] Arr={'h','e','l','l','o'};
        String St=new String(Arr);
        System.out.println(St);
    }
}
```

Output

```
PS C:\Nithish\College\coding\java> javac StringDemo.java
PS C:\Nithish\College\coding\java> java StringDemo
hello
```

2.Calculator

Code:

```java
import java.util.Scanner;
public class calc{
    public static void main(String[] args){
        int f=1;
        while(f==1){
            Scanner fl=new Scanner(System.in);
            System.out.println("Enter your choice for performing arithmetic operation ");
            System.out.println("1. Addition ");
            System.out.println("2. Subtraction ");
```

```java
System.out.println("3. Multiplication ");
System.out.println("4. Division ");
System.out.println("5. Modulus ");
System.out.println("6. Power ");
System.out.println("0 to Quit the program ");
int ch=fl.nextInt();
if(ch==0){
    System.out.println("Thank for using the Calculator");
    break;
}
System.out.print("Enter the first number: ");
double n1=fl.nextDouble();
System.out.print("Enter the second number: ");
double n2=fl.nextDouble();
double r;
switch (ch) {
    case 1:
        r=n1+n2;
        System.out.println("The output after performing addition is: "+r);
        break;
    case 2:
        r=n1-n2;
        System.out.println("The output after performing subtraction is: "+r);

        break;
    case 3:
```

```java
                r=n1*n2;
                System.out.println("The output after performing
multiplication is: "+r);
                break;
            case 4:
                r=n1/n2;
                System.out.println("The output after performing division is:
"+r);
                break;
            case 5:
                r=n1%n2;
                System.out.println("The output after performing modulus is:
"+r);
                break;
            case 6:
                r=Math.pow(n1,n2);
                System.out.println("The output after performing power is:
"+r);
                break;
            default:
                System.out.println("Enter valid choie");
                break;

        }
    System.out.println("If you want to continue calculation enter 1
otherwise enter 0");
    int u=fl.nextInt();
    if(u!=1){
        f--;
```

```
            }
        }
        System.out.println("Thank for using the Calculator");
    }
}
```

Output

```
PS C:\Nithish\College\coding\java> javac calc.java
PS C:\Nithish\College\coding\java> java calc
Enter your choice for performing arithmetic operation
1. Addition
2. Subtraction
3. Multiplication
4. Division
5. Modulus
6. Power
0 to Quit the program
1
Enter the first number: 12
Enter the second number: 13
The output after performing addition is: 25.0
If you want to continue calculation enter 1 otherwise enter 0
1
Enter your choice for performing arithmetic operation
1. Addition
2. Subtraction
3. Multiplication
4. Division
5. Modulus
6. Power
0 to Quit the program
2
Enter the first number: 23
Enter the second number: 22
The output after performing subtraction is: 1.0
If you want to continue calculation enter 1 otherwise enter 0
1
Enter your choice for performing arithmetic operation
1. Addition
2. Subtraction
3. Multiplication
4. Division
```

```
5. Modulus
6. Power
0 to Quit the program
3
Enter the first number: 5
Enter the second number: 5
The output after performing multiplication is: 25.0
If you want to continue calculation enter 1 otherwise enter 0
```

```
Enter your choice for performing arithmetic operation
1. Addition
2. Subtraction
3. Multiplication
4. Division
5. Modulus
6. Power
0 to Quit the program
4
Enter the first number: 6
Enter the second number: 3
The output after performing division is: 2.0
If you want to continue calculation enter 1 otherwise enter 0
1
Enter your choice for performing arithmetic operation
1. Addition
2. Subtraction
3. Multiplication
4. Division
5. Modulus
6. Power
0 to Quit the program
5
Enter the first number: 5
Enter the second number: 3
The output after performing modulus is: 2.0
If you want to continue calculation enter 1 otherwise enter 0
1
Enter your choice for performing arithmetic operation
1. Addition
2. Subtraction
3. Multiplication
4. Division
5. Modulus
6. Power
```

```
0 to Quit the program
6
Enter the first number: 3
Enter the second number: 3
The output after performing power is: 27.0
If you want to continue calculation enter 1 otherwise enter 0
0
Thank for using the Calculator
PS C:\Nithish\College\coding\java>
```