

Lab Tutorial #1

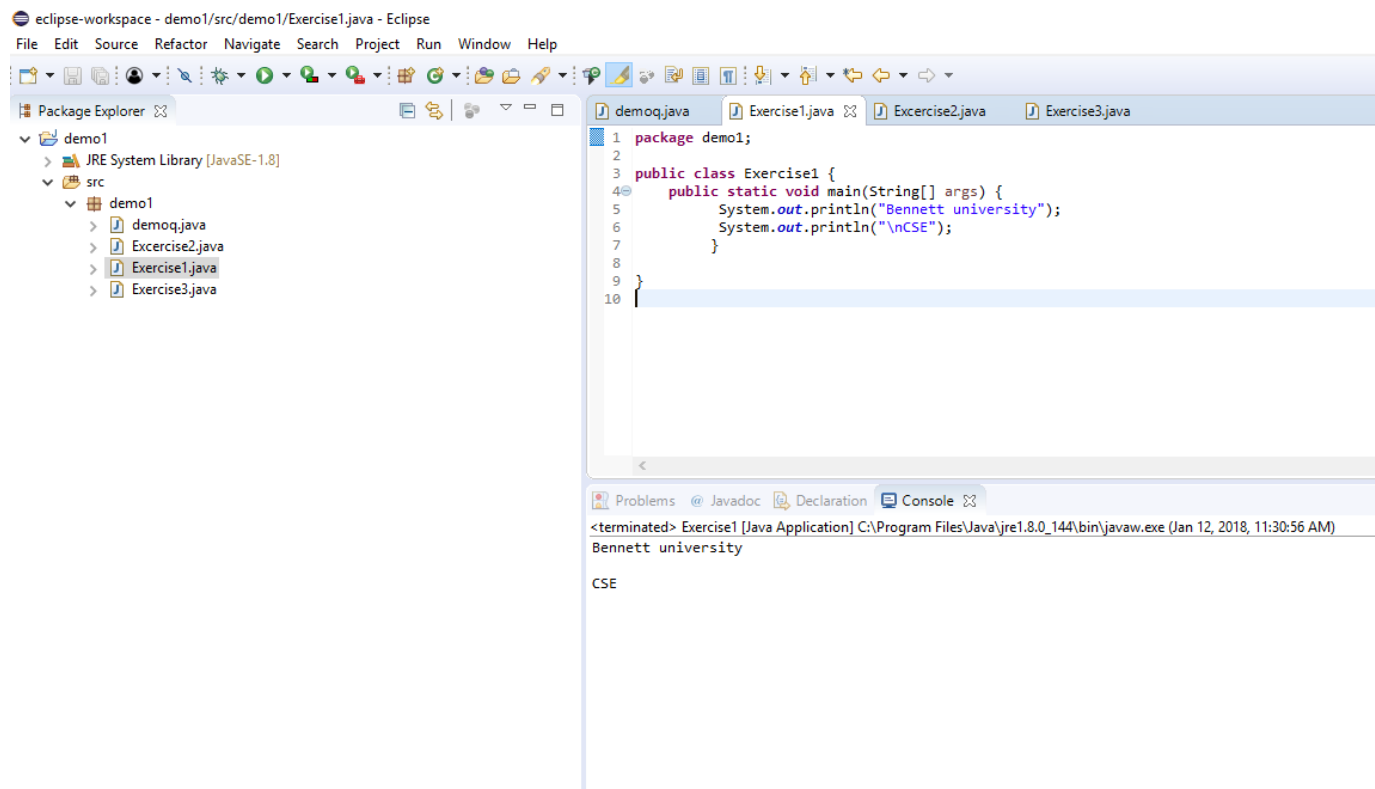
1) **Objective:** To print 'Bennett University' on screen.

Problem Statement:- Write a Java program to print 'Bennett University' on screen and then print CSE on a separate line.

Code:-

```
package demo1;

public class Exercise1 {
    public static void main(String[] args) {
        System.out.println("Bennett university");
        System.out.println("\nCSE");
    }
}
```



Screenshot:-

Explanation:- The first line

```
public class Exercise1 {
```

declares a class called Exercise1. (Almost) everything in Java is contained in something called a **class**.

The second line

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

declares a method called main(String[]). Most of the actual code in Java is found within methods. Methods are one of the elements of classes. This particular method is executed when the **Exercise1** class is executed. Note the `String[] args`. This means that the "arguments" will be passed into the main method - essentially, within this method, you can edit and see arguments.

The third line

```
System.out.println("Bennett university");
```

does pretty much what you think it does: it writes “**Bennett university**” to your screen. `println` means to print the string (text) provided and then add a line break (like the enter key).

2) **Objective:** To find the sum of two number using arithmetic operators.

Problem Statement:- Write a Java program to print the sum of two numbers.

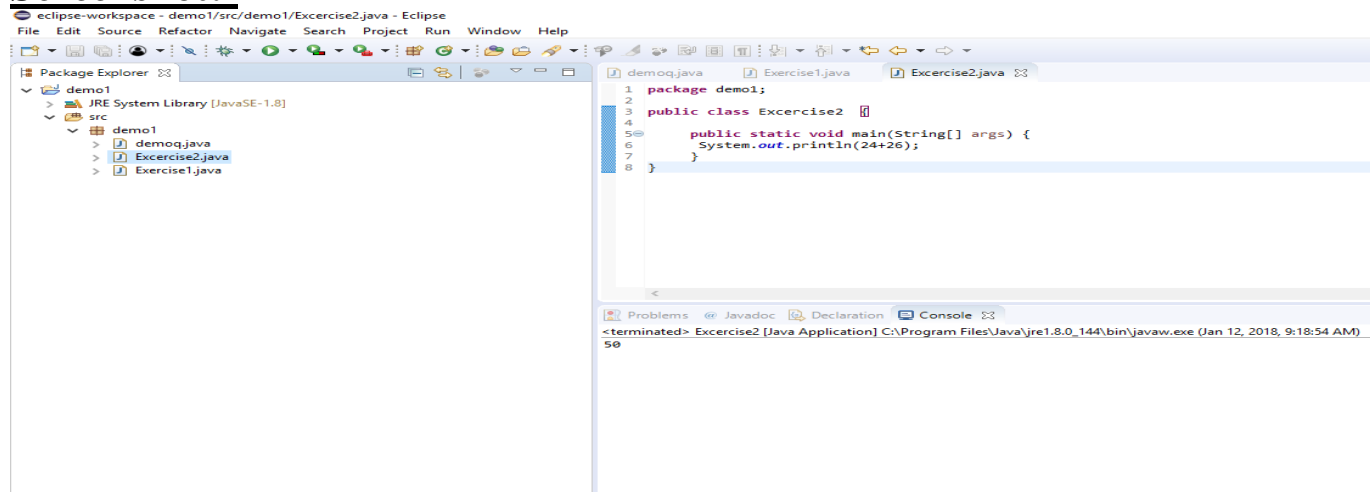
Code:-

```
package demo1;

public class Excercise2 {

    public static void main(String[] args) {
        System.out.println(24+26);
    }
}
```

Screenshot:-



Explanation:-

The line

```
System.out.println(24+26);
```

does pretty much what you think it does: it writes addition of two numbers to your screen. `println` means to print the string (text) provided.

3) **Objective:** To find the division of two number using arithmetic operators.

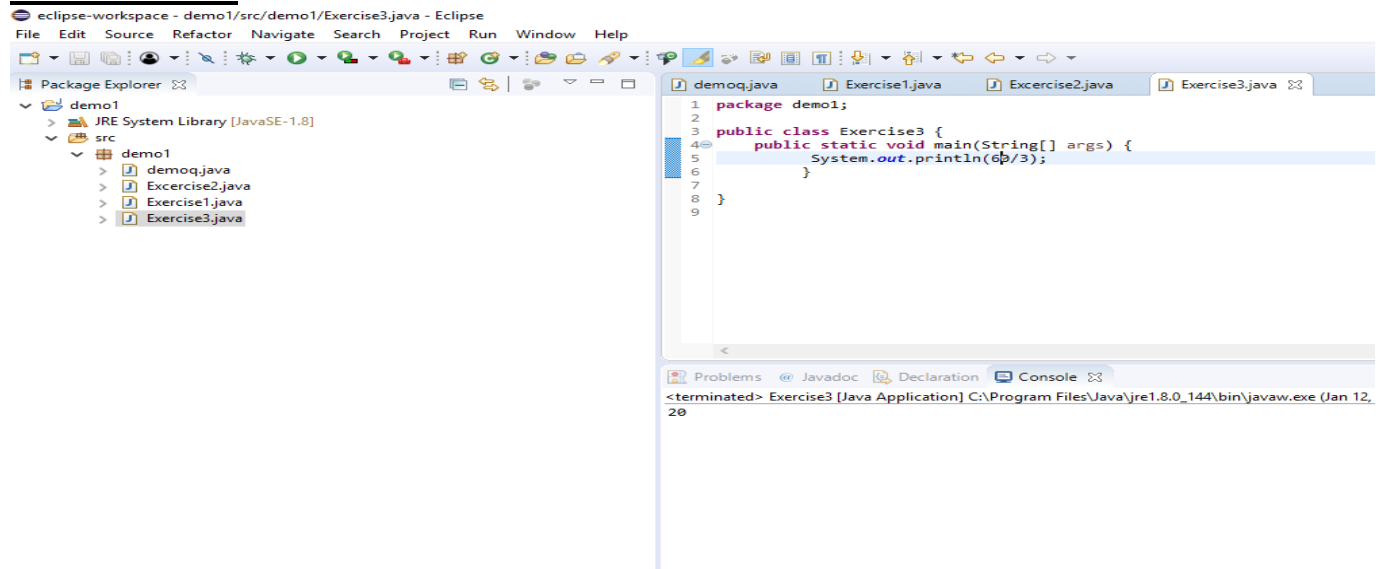
Problem Statement:- Write a Java program to divide two numbers and print on the screen.

Code:-

```
package demo1;

public class Exercise3 {
    public static void main(String[] args) {
        System.out.println(60/3);
    }
}
```

Screenshot:-



Explanation:-

The line

```
System.out.println(60/3);
```

writes division of two numbers to your screen. `println` means to print the string (text) provided.

Lab Practice

4) Objective: To find the output of the given data using arithmetic operators.

Problem Statement:- Write a Java program to print the result of the following operations.

Test Data:

a. $-5 + 8 * 6$

b. $(55+9) \% 9$

c. $20 + -3*5 / 8$

d. $5 + 15 / 3 * 2 - 8 \% 3$.

5) Objective: Find the product of two numbers

Problem Statement:- Write a Java program that takes two numbers and display the product of two numbers.

Test Data:

a=10

b=5

6) Objective: To find the multiplication table up-to 10 of a given number.

Problem Statement:- Write a Java program that takes a number and prints its multiplication table up-to 10

Test Data:

a=10

7) Objective: To find the sum (addition), multiply, subtract, divide and remainder of two number using arithmetic operators.

Problem Statement:- Write a Java program to print the sum (addition), multiply, subtract, divide and remainder of two numbers.

Test Data:

a=10

b=5

8) Objective: To find the specified expressions using arithmetic operators.

Problem Statement:- Write a Java program to compute the specified expressions and print the output.

Test Data:

$((25.5 * 3.5 - 3.5 * 3.5) / (40.5 - 4.5)).$

9) Objective: To find the area and perimeter of a circle.

Problem Statement:- Write a Java program to print the area and perimeter of a circle.

Test Data:

Radius = 7.5

Note:

Area = $\pi * r * r$

Perimeter = $2 * \pi * r$

Where $\pi = 3.14$

10) Objective: To find the average of three numbers.

Problem Statement:- Write a Java program that takes three numbers to calculate and print the average of the numbers.

Test Data:

$a=10$

$b=5$

$c=3$

11) Objective: Find the values using java operators.

Problem Statement:- What will be the output of following program ?

```
class Opr
{
    public static void main(String args[])
    {
        int x=5,y;
        y= ++x + x++ + --x;
        System.out.println(x + "," + y);
    }
}
```