

King Saud University
College of Computer & Information Science
CSC111 – Lab01
Hello World
All Sections

Objectives:

- 1- Student should learn about the labs and other facilities provided by the college for CSC111.
- 2- Student should setup his lab account and WebCAT (the automatic grading system).
- 3- Student should get familiar with linux, java and eclipse.
- 4- Student should know how to submit to WebCAT.
- 5- Student should know how to compile and run java programs from command line.

Preparation for lab (30 mins):

Make sure you familiarize your self with the labs and facilities provided by the college.

Get your username and password for the lab and for WebCAT from the instructor.

Lab Exercise 1 (30 mins)

Write a java program that prints the following (along with a new line at the end):

```
Welcome
```

Class name should be HelloWorld

Solution

- 1- Create a new project in eclipse and name it **lab01**
- 2- Create a new class and name it **HelloWorld**. Make sure you choose the `public static void main` option.
- 3- Write the program as following:

```
public class HelloWorld {  
    public static void main(String[] args) {  
        System.out.println("Welcome");  
    }  
}
```

- 4- When you are done, save your program and run it. Make sure it prints the output as shown above.
- 5- Submit your program to WebCAT through eclipse to get familiar with WebCAT. Ask your TA for help.
- 6- (Optional) Use a text editor to write the same program again.
- 7- Save it as HelloWorld.java.
- 8- Compile it from the command line as following:

```
javac HelloWorld.java
```

- 9- Run it from the command line as following:

```
java HelloWorld
```

Lab Exercise 2 (30 min)

Write a java program that does the following:

- 1- Defines two integer variables x, y
- 2- Assigns x the value 8.

- 3- Assigns y the value 4.
- 4- Prints the addition of x and y (x + y) in a new line.
- 5- Prints the multiplication of x and y (x * y) in a new line.
- 6- Prints the value of adding x to itself then to y (x + x + y) in a new line.
- 7- Defines a new double variable z then assign it the value of dividing x by y (x/y).
- 8- Prints the value of z in a new line.

Name your class `Variables`

Here is a sample output:

```
x + y = 12
x * y = 32
x + x + y = 20
z = 2.0
```

Solution

- 1- Use the project `lab01`
- 2- Create a new class and name it `Variables`. Make sure you choose the `public static void main` option.
- 3- Complete the following pseudocode:

```
public class Variables {
    public static void main(String[] args) {
        int x = 8;
        /* define variable y */
        System.out.println("x + y = " + (x + y));
        System.out.println(/* ..... */);
        /* ..... */
        /* data type */ z = x / y;
        /* ..... */
    }
}
```

Done...