Day 1

1. **What is the difference between JVM, JDK and JRE?**

JVM is an abstract machine, which does not physically exist. It provides a runtime environment to run the Java Code or applications. It then converts Java bytecode into machine language. JVM is a part of Java Run Environment (JRE). It cannot be separately downloaded and installed. In order to install JVM, it must have JRE first.

JDK is a software development environment that is used to develop applets and Java applications. It contains Java Run Environment (JRE) and other development tools such as an interpreter/loader (Java), a compiler (Javac), an archiver (jar), documentation (Javadoc), etc. It can be used in different operating systems such as Windows, MacOS, Solaris, and Linux. JDK can be installed in more than one version on the same computer. The Java Platforms that are released by Oracle Corporation include Standard Edition Java Platform, and Enterprise Edition Java Platform.

JRE is a piece of software which is designed to develop Java applications and run other software. It does physically exist. It contains the class libraries, loader class, and JVM. In order to run a Java program, JRE must be installed. In some cases, JDK is not required to be installed in order to run Java programs. All JDK versions comes bundled with Java Runtime Environment, therefore it is not necessary to install it separately.

1. **Write a program that sets an int variable x equalling to 76. Then, change the value of x to 81. Print x to the console.**

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\* This program simply displays the changes of the value of the original variable 76 to 86.

\*

\* **@author** Zulmi Yahya

\* **@version** 1.0

\* **@since** 2021-08-02

\*/

**package** pkg\_1;

**public** **class** Class1 {

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

// **TODO** Auto-generated method stub

**int** val = 79;

val = 81;

System.***out***.println(val);

}

}

1. **Enter an arbitrary capital letter A ~ Z and convert them to lowercase letter.**

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\* This program implements the toLowerCase method to change the Uppercase values into lowercase.

\*

\* **@author** Zulmi Yahya

\* **@version** 1.0

\* **@since** 2021-08-02

\*/

**package** pkg\_1;

**public** **class** Class2 {

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

// **TODO** Auto-generated method stub

String myNameUpper = "ABDUL ZULMI BIN YAHYA";

System.***out***.println("The uppercase is " + myNameUpper);

String myNameLower = myNameUpper.toLowerCase();

System.***out***.println("The lowercase is " + myNameLower);

}

}

1. **Write a program to convert the decimal value of letter C to its corresponding ASCII code table.**

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\* This program implements the toLowerCase method to change the Uppercase values into lowercase.

\*

\* **@author** Zulmi Yahya

\* **@version** 1.0

\* **@since** 2021-08-02

\*/

**package** pkg\_1;

**public** **class** Class2 {

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

// **TODO** Auto-generated method stub

String myNameUpper = "ABDUL ZULMI BIN YAHYA";

System.***out***.println("The uppercase is " + myNameUpper);

String myNameLower = myNameUpper.toLowerCase();

System.***out***.println("The lowercase is " + myNameLower);

}

}