

# CSCI-101 Programming I

## Lab4e

### INSTRUCTIONS

Inside your **lab4** directory create a file named **Lab4e.java**.

Open up a browser and search "Java 19 Integer" and open the [docs.oracle.com](https://docs.oracle.com/javase/19/docs/api/java/lang/Integer.html) documentation for the **Integer** class. Use the documentation to solve the problems below.

Inside the **Lab4e.java** file write a program that does the following:

Print to the screen the largest value that an integer can hold using **Integer.MAX\_VALUE**.

Print to the screen the smallest value that an integer can hold using **Integer.MIN\_VALUE**.

Print to the screen the number of bytes used to represent an integer using **Integer.BYTES**.

Ask the user to enter in an integer.

Declare a String named **intString**.

Read the value from the keyboard as a **String** using the Scanner's **next()** method and store the string in the variable **intString**.

Declare an int named **intValue**.

Convert **intString** to an **int** using **Integer.parseInt()** and store the int in **intValue**.

Print the value in **intString** to the screen.

In your browser, search "Java 19 Character" and open the [docs.oracle.com](https://docs.oracle.com/javase/19/docs/api/java/lang/Character.html) documentation for the **Character** class. Use the documentation to solve the problems below.

Print to the screen the number of bytes used to represent a char using **Character.BYTES**.

Ask the user to enter a character.

Read the character from the keyboard and store the character in a variable named **myChar**.

Use **Character.isDigit()** to determine if the character is a digit. If so, print "char is a digit"; otherwise print "char is not a digit".

Declare an integer named **intValue**.

Use **Character.getNumericValue()** to get the integer value of the character in **myChar** and store the integer value in **intValue**.

Print the value in **intValue** to the screen.