

6. **[6]** Write a code fragment that *declares* and *reads* a word (`myWord`) and a double (`myDbl`), then pauses with the message “Press Enter...”. Assume that a Scanner named `kbd` has already been created.

7. **[8]** Write a conditional control to assign a value to the variable `toll` based on the value in the variable `vehicleClass`, based on the following chart.

| | | | | |
|---------------------------|----------|----------|---------------|----------------|
| <code>vehicleClass</code> | <u>1</u> | <u>2</u> | <u>3 or 4</u> | <u>(other)</u> |
| <code>toll</code> | 3.00 | 4.00 | 5.00 | 10.00 |

Use EITHER a nested if/if-else control OR a switch control (not both).

8. **[8]** Write a loop (and its associated initializations) to sum a sequence of positive integers entered by the user. The loop stops when the user enters zero or a negative number. Assume that a Scanner named `kbd` has already been created.

9. **[8]** Write nested for loops to produce the following output:

```
*
**
***
****
```

10. [12] Multiple Choice: select the *best available* answer from the options shown.

A byte is made up of

- a) 0 or 1 bits.
- b) 2 bits.
- c) 8 bits.
- d) 256 bits.
- e) as many bits as are required to represent the object the programmer created.

An example of an input device is

- a) a monitor.
- b) a mouse.
- c) a printer.
- d) the CPU.
- e) (all of the above)

An *imperative* computer programming language is one that

- a) has us draw pictures to show the computer what to do.
- b) has us explain to the computer what things mean.
- c) has us specify which operations are to be carried out at the same time.
- d) has us tell the computer what to do.
- e) is only understood by the CPU of the same kind of computer.

Based on the style guidelines for this course, `numStudents` would be the name of a

- a) class.
- b) constant.
- c) method.
- d) variable.
- e) (any of the above)

CPU stands for

- a) Canadian Programmers Union.
- b) central processing unit.
- c) computer's primary unit.
- d) computer's principle unit.
- e) controlled programming unit.

Java is more suited to Web applications than C++ because

- a) C++ programs are imperative and object oriented.
- b) compiled Java code can be run on many different kinds of computers.
- c) Java programs are much easier to write than C++ programs.
- d) more kinds of computers have Java compilers than have C++ compilers.
- e) (all of the above)

The command to create a Scanner named kbd is

- a) `Scanner kbd = new Scanner();`
- b) `Scanner kbd = new Scanner(System)`
- c) `Scanner kbd = new Scanner(System.in);`
- d) `Scanner kbd = new Scanner(System.out);`
- e) `Scanner kbd = new Scanner(System.out.print);`

The correct header for the main method of a program is

- a) `public void main()`
- b) `public void static main()`
- c) `public void main(String args)`
- d) `public static void main(String[] args)`
- e) `public void static main(String[] args)`

The difference between *main memory* and *secondary memory* is

- a) main memory is inside the computer and secondary memory is outside.
- b) main memory is on disks and tapes, but secondary memory is just on disks.
- c) main memory is used for programs that are running, and secondary memory is for long-term storage.
- d) secondary memory is faster than main memory.
- e) secondary memory holds less than main memory.

The output of the command `System.out.print("\7 / 4 = " + (7 / 4))` is

- a) `1 = 1`
- b) `1.75 = 1.75`
- c) `7 / 4 = 1`
- d) `7 / 4 = 1.75`
- e) `7 / 4 = (7 / 4)`

The value of the expression $2 + 8 / 2 + 3$ is

- a) 2
- b) 2.0
- c) 8
- d) 9
- e) 9.0

Which of the following loops does NOT iterate exactly ten times?

- a) `for (int i = 0; i < 10; i++) { ... }`
- b) `for (int i = 0; i <= 10; i++) { ... }`
- c) `for (int i = 1; i <= 10; i++) { ... }`
- d) `for (int i = 10; i > 0; i--) { ... }`
- e) (all of the loops above iterate exactly ten times)

(This page is for your rough calculations. You may tear it off the exam booklet.)