

# Java Programming

## Java Skills: Self Assessment

### Skill set 1

Using the Cloud9 IDE, I can

- create a file
- paste java code into a file and save it with a .java extension
- compile a saved java program using the Linux command line and javac
- execute a java program from the Linux command line using the java interpreter

### Skill Set 2

Using a bash shell under Linux, I can

- list the contents of a directory using the \_\_\_\_\_ command
- view the contents of a text file using at least three commands:
  1. \_\_\_\_\_
  2. \_\_\_\_\_
  3. \_\_\_\_\_
  4. \_\_\_\_\_
- create a directory using the \_\_\_\_\_ command
- change my working directory to a specified directory using the \_\_\_\_\_ command

### Skill Set 3

In a Java program, I can

- declare and use the following built-in (primitive) data types:
  - int
  - double
  - Boolean

## Skill Set 4

- use the following arithmetic operators
  - addition +
  - subtraction –
  - multiplication \*
  - division /
  - mod(remainder) %
  - and can use casting to change int expressions to double
  - and I know the precedence of the operations follows the expected order of operations

## Skill Set 5

- I can use the following relational operators (in loops or if conditions)
  - is equal ==
  - is not equal !=
  - less than <
  - greater than >
  - less than or equal to <=
  - greater than or equal to >=

## Skill set 6

- I can use the assignment, increment and decrement operations:
  - ==
  - ++
  -

## Skill Set 7

- I can use logical operators
  - AND &&
  - OR ||
  - NOT !

## Skill Set 8

- I can match special escape sequences with their meaning:
  - \n tab character
  - \\ back-slash
  - \" new line
  - \t quote

## Skill Set 9

- I can use control statements
  - if
  - if..else
  - nested if..else
  - for loops
  - while loops

## Skill Set 10

- I can use input and output statements to
  - send a text message to the screen
  - read an integer value from the keyboard, store it in a variable
  - read a long value from the keyboard, store it in a variable
  - read a single-word string from the keyboard, store it in a variable
  - enter and read a multi-word string from the keyboard, and store it in a variable
  - send a text message along with the value of a String, int, boolean, or double variable.