

## Exercise on Lesson 2

1. What are the three main types of variables used in Java and what are they used to store?

**int – Integer values (both positive and negative)**

**double – Decimal values**

**String – Strings of characters**

2. What type of variable would you use to store your name?

**String**

3. What type of variable would you use to store the square root of 2?

**double**

4. What type of variable would you use to store your age?

**int**

5. Write a single line of code that will create a double precision variable called *p* and store  $1.921 \times 10^{-26}$  in it.

**double p = 1.921E-26;**

6. Write a single line of code that will create an integer variable called *i* and store 407 in it.

**int i = 407;**

7. Write a single line of code that will create a *String* variable called *my\_name* and store your name in it.

**String my\_name = "Eric Winsor";**

8. Write a line of code that will **declare** the variable *count* to be of type *int*. Don't initialize.

**int count;**

9. Write a line of code that **initializes** the double precision variable *bankBalance* to 136.05. Assume this variable has already been declared.

**bankBalance = 136.05;**

10. Which of the following are legal variable names?

scooter13 139\_scooter homer-5 ;mary public doubled double ab c

**scooter13 doubled**

11. Which of the following is the most acceptable way of naming a variable. Multiple answers are possible.

- a. GroovyDude
- b. GROOVYDUDE
- c. groovyDude
- d. Groovydude
- e. groovy\_dude
- f. groovydude

**c. groovyDude  
e. groovy\_dude**

12. Comment on the legality of the following three lines of code.

```
double dist = 1003;  
int alt = 1493.86;  
int num = 1_2_3;
```

**The first line of code is legal because an integer value can be stored in a double.**

**The second line of code is illegal because a decimal value cannot be stored in an int.**

**The third line of code is legal because numeric values can be separated by underscores.**