Objectives

- Define Variables, Literals
- Variable naming convention
- `print`, `println` commands
- Java comments

Preprogram Questions

1. Arithmetic Operators Which of the following is a valid java variable name:
   ```
   a) ?myName
   b) 12Car
   c)  $money
   d)  int
   ```

   Answer : c

2. Declare a variable of type `int` to hold the student grade.

   Answer :

   Examples of correct answers : `int studentGrade, stGrade;`

   Examples of incorrect answers : `int StudentGrade, STGrade, STUDENT_GRADE;`

3. Declare a variable to hold the constant value for interest rate of 2.5.

   Answer: final double INT_RATE = 2.5; OR final double INTEREST_RATE = 2.5;

4. Declare a `String` variable to hold the name `John`.
   Answer : `String name="John";`

5. What is the value of `z` after the following code is executed?
   ```
   int x = 9, y = 4;
   double  z = x/y;
   ```

   Answer : 2.0

6. What is the value of `z` after the following code is executed?
   ```
   int x = 9;
   double  y = 4, z = x/y;
   ```

   Answer : 2.25

7. What is the value of `z` after the following code is executed?
   ```
   int x = 9;
   ```

```
double  y = 4, z = x%y;
```

Answer : 1.0

8. Will the following code compile:
    final int X =10;
    X=9;

    Answer: No. The value of constant variable cannot be changed.

9. Complete the following code to declare two variables of type `int` and print their sum using the `sum` variable:

```
int x = 4;
int y = 7;
int sum x +y;
System.out.println(sum);
```

10. In every java program :
    a. There must be at least two variables declared
    b. There must be a method called "`main`"
    c. All of the variables must be integers

    Answer : b

Practice writing Java Program

Create a java program that does the following:

- Create an integer variable to hold the approximate number of words you can type in a minute.
- Create a `String` variable to hold your name.
- Display a message on the Eclipse Console showing your name and the number of words you can type in a minute. Example: "`Mary can type 50 words in a minute!`"
- Use arithmetic operators to calculate the number of words you can type in a day and display the result on the console.
- Add at least 2 useful comments to your code.