

**WIX1002 Fundamentals of Programming**  
**Semester 1 2015/2016**  
**Tutorial 2 Java Fundamental**

Build the pseudocode and flow chart for each of the problems:

1. Display the sentence Knowledge is Power.
  - a. In one line using three Java statements
  - b. In three lines using one Java statement
2. Write a Java statement that display "RAM" is called Random Access Memory.
3. Correct the error for the following statements.
  - a. `System.Println("Hello Java!");`
  - b. `System.out.println("Introduction to Java!")`
  - c. `System.out.println("\t is the horizontal tab character");`
  - d. `system.out.println("Java is case sensitive!" );`
4. Write statements for each of the following
  - a. Declare a variable that used to store the value of body weight.
  - b. Declare a variable that used to store URL.
  - c. Initialize a variable with the value set to true.
  - d. Initialize a variable with the value set to 2400000000.
  - e. Initialize a variable with the value set to Z.
  - f. Declare a constant variable. The value of the constant variable is Java.
5. Correct the error for the following statements.
  - a.

```
final double AMOUNT = "32.5";
AMOUNT += 10;
System.out.println("The amount is " + AMOUNT);
```
  - b.

```
string chapter = 'Summary';
System.out.println(chapter);
```
  - c.

```
int num;
++num++;
num1 = num;
```
  - d.

```
int num = 3000;
System.out.printf("%4.2f\n", num);
```

- e.
- ```
String contact;  
Scanner keyboard = new Scanner(System.out);  
contact = keyboard.nextLine();
```
6. Write the java statements that calculate the Body Mass Index (BMI).  
 $BMI = w / h^2$ . The input of the program is **w for weight in kg** and **h for heights in m**. Display the BMI in two decimal places.
7. Write the java statements that calculate the area of a circle. The input of the program is diameter. Diameter = 2r. area =  $\pi r^2$  (Note  $\pi = \text{Math.PI}$ )