Lab week 3

Exercise 1:

Exercise 1: Write a program that reads the unknown variables found in the following expression to compute the value of Z.

\[ Z = 2^x^{(h/y)} \]

*Hint: \( a^b \) in java = Math(a,b)*

Exercise 2:

Write a Java program to read in the weight (in pounds) of an object and then compute and print the weight in kilograms and grams. You must create a class weight contains pounds, Kilos. And grams and use it in class main as shown in the following UML representation.

(Hint: 1 pound is equal to 0.453592 kilogram and 453.59237 grams.)

Example:

Enter the weight in pounds: 8
The weight in Kilograms is: 3.628736
The weight in Grams is: 3628.73896

Exercise 3:

Write a Java program to read two data items and print their sum, difference (must be positive), product, and quotient (must divide by non-zero number).

Example:

Enter two numbers: 10 5
The sum = 15
The difference = 5
The product = 50
The quotient = 2

Exercise 4:

Write a java program that reads an integer and print the least significant digit and the next
least significant digit.

Example:

Enter an integer number > 7235

The least significant digit is 5

The next least significant digit is 3

Exercise 5:

Write a java program that reads an integer (decimal number smaller than 32) and prints the equivalent representation in binary system.

Hint: use four variables to store the value of the binary digits.

Example:

Enter an integer number smaller than 32 > 12

The equivalent in binary = 01100