Assignment 1

Q1) Convert the following Single-Precision Binary to Decimal.

    i)   1000 1000 1001 1000 1000 0000 0000 0000

    ii)   0001 0100 1000 0011 0100 1000 0000 0000

Q3) Predict what the following code will print and whether it will execute or throw an error. Test your predictions by running the code in Python. Were your predictions correct?

    i)   print("Hello","World")

    ii)   print("two plus two is: " + 4)

    iii)   print("Python was first launched in ", 1989)

Q2) Python's built-in Math provides us access to some common math functions as well as certain constants. Try using the math library to evaluate the following:

    i)   Absolute value of -17.5

    ii)   Roots of the quadratic equation $x^2 + 5x + 6$

    iii)   Circumference of a circle with radius 5

    iv)   Volume of a Cylinder with diameter 10 and height 25

    v) $\log_8 64$

    vi) $7 - e^{-3}$

You can view all the different functionalities of Python Math Library using the command `help(math).` *Alternatively, you can use the following link for reference:*

[All Mathematical Functions Defined under Math Module in Python 3 (programiz.com)](#)