Assignment # 1   COMP131   (Fall 2019/2020)

Notes:
1. You should include *all the steps* that you followed to find the answer.
2. The assignment is due on, **Monday 21/10/2019**.
3. The assignment should be written on A4 paper and submitted on the due date in the lecture class.

Question 1:

Using 8-bits pattern and **two's complement**, find the answers.
1. $(73)_8$ - $(32)_4$ = ($)_{10}$
2. $(2C)_{16}$ - $(01101110)_2$ = ($)_{10}$
3. $(00010101)_2$ - $(46)_{10}$ = ($)_{10}$

Question 2:

Use the 32-bits floating point representation to represent the following numbers in memory:
   1. $(9.375)_{10}$ **2.** $(0.0125)_{10}$ **3.** $(-152.0625)_{10}$

Question 3:

The following is real number (float) represented in the computer memory using 32-bit floating point representation. Find out the decimal value for this representation.

00
00
3A
C2

Question 4:

1- Represent the following *__integer__* in computer memory **-177**.

2- Use *__odd parity__* to represent the following *__word__* in computer memory **AL-Quds**
   Hint: ASCII value for " - " is $(45)_{10}$