NED University of Engineering & Technology
Computers & Programming (EE-163)
Mid-Term Exam Spring 2021
Department of Electrical Engineering

Max. Marks: 20
Time Allowed: 50 min

Instructions:
1. Attempt all Questions
2. In case, you find some missing values then assume by yourself and properly mention it.

Question 1: [CLO1]

Write a program that inputs three integers from the keyboard and prints the sum, average, and [7] product of these three numbers. Also, find the smallest and largest of these numbers **using** decision making structure. The screen dialog should appear as follows:

```
Input three different integers: 13 27 14
Sum is 54
Average is 18
Product is 4914
Smallest is 13
Largest is 27
```

Question 2: [CLO1]

Write a program that asks the user to enter coefficients a, b and c of the standard quadratic equation: [7]

$$ax^2 + bx + c = 0$$

And find the roots of the equation **using** quadratic formula for real roots only.

[Hint: Quadratic formula is, $x = \dfrac{-b \pm \sqrt{(b^2 - 4ac)}}{2a}$]

Question 3: [CLO1]

Apply *IEEE 754* standard to convert the following decimal number into a single precision floating [6] point number.

120.0625