EE2003 – Computer Organization and Assembly Language (Sp'24)   Mar 2024
Assignment: 01, **Weight**: 3.0, Due Date: 2 Jun, **CLO:** 1
Teacher: Dr Muhammad Usman Abbasi

Name: _____Roll No. P ____- _____   **Section:** BAI-4A

Note:

Plagiarism will be marked zero straight away to all parties involved.
Question 2 requires an explanation, which should be kept short and to the point.
Late submissions are not allowed.

Question No. 1:
Write a program in assembly language for each of the below separately that sets the following flags.
(write four programs i.e. One for each part)

a) Zero Flag
b) Carry Flag
c) Parity Flag
d) Auxillary Flag

Question No. 2:
What will be the size of the following assembly language program in bytes? Explain your answer using ".lst" file of this code.

```
[org 0x0100]
        mov  ax, 5
        mov  bx, 10
        add  ax, bx
        mov  bx, 15
        add  ax, bx
        mov  ax, 0x4c00
        int  0x21
```

Question No. 3:
Calculate the physical memory address generated by the following segment-offset pairs:

1DDD:0436
1234:7920
74F0:2123
0000:6727
FFFF:4336
1080:0100