

University of Asia Pacific (UAP)

Department of Computer Science and Engineering (CSE)

CSE 312: Microprocessor and Assembly Language Lab

Lab Assignment 1

N.B.: Upload the assignment in .pdf format renaming the pdf file as ID_Name.pdf

Problem Statement 1:

Perform the following operations using emu8086:

- a) Declare the following variables assigning the stated values:

Table1:

Variable_name	Variable_size	Value_assigned
NUMB	DB	01111000B
NUMD	DB	120D
NUMO	DB	170O
NUMH	DB	78H
CHAR	DB	'3'
CHARASC	DB	3
STR	DB	"HELLO WORLD"
UNKNOWN	DB	?

- b) Take any character as input and assign that character as the value of the UNKNOWN variable.
- c) Print the values of all 8 variables with a newline between each print statement. Provide a screenshot of your output screen.

- d) Provide a screenshot showing the status of the variables after emulating your code.
- e) State the reason why each output shown on the output screen of emu8086 is different from that of **Table1** ? Provide justification for each of the 8 variables.

Instructions:

Your assignment should contain the following in sequential order

- 1) The problem statement
- 2) Screenshot of the assembly code
- 3) Status of all 8 variables after assigning values
- 4) A screenshot of the output screen

Note:

- Include a cover page in your assignment/report
- You must upload the .asm file and .pdf file in Google classroom within the stated deadline. The .asm file containing your source code and the .pdf file containing the report with required screenshots
- The .asm and .pdf file must contain your ID and Name as the filename