

# FINAL Course Assessment/MACHINE PROBLEMS CS125 AND CS125L Architecture and Organization

Nov 2021

**General Directions:** Answer what is asked/prompted in each of the given item.

Note: This Course Assessment was conducted via Blackboard Learn. Actual questions/prompts were captured

### 1. Reversed Characters

Write an Assembly Code that prompts the user to enter 10 characters. The code shall show the reversed order of the inputted characters

#### Sample Run:

Enter characters: wakokok123<enter>

Reversed: 321kokokaw

Would you like to enter again? Press 1 if yes otherwise press any key: 1

Enter characters: 0123456789<enter>

Reversed: 9876543210

Would you like to enter again? Press 1 if yes otherwise press any key: 2

Program Terminated Normally

## 2. Three Character Password:

Write an Assembly code that prompts the user to enter a 3-character password. The program shall not terminate unless the correct password has been inputted:

Note: Set your own password. Password is hardcoded and doesn't need to be inputted

#### Sample Run (password is 123):

Enter password: 112 Enter password: 132 Enter password: 123

Program Terminated Normally

## 3. Character Search.

Write an Assembly code that prompts the user to enter characters. Inputting of character will not stop unless @ sign has been entered. After inputting, the program will ask the user to enter a character to find. The program shall show if the character is found or not

# Sample Run:

Enter characters: weakjdudkio@ Enter character to search: j Character Found!

### Sample Run:

Enter characters: isprikitik@ Enter character to search: x Character Not Found!

# Submit a pdf copy with screenshots of your running program

**Submit also an insight about the use of Instructions set ( could contain:** The importance with respect to architecture, possible use, and overall conclusion about the structure of coding in 8086**). Include this in your pdf answer** 

Submit also textfile or asm file of the assembled codes

Please do not zip! Just upload ALL

Prepared by/ Date (Faculty Member)	Reviewed by/ Date (Program Chair)
DENNIS A. MARTILLANO/ Nov 3, 2020	A THOMPSENS FOR



# FINAL Course Assessment/MACHINE PROBLEMS CS125 AND CS125L Architecture and Organization

Nov 2021

## **PART B. Discussion and ESSAY**

Discuss in your best possible way, the importance, relevance, and relationship of ASSEMBLY LANGUAGE PROGRAMMING to our modern computing architecture?

You may want to inject your insights about:

- The inclination of Von Neumann Architecture design to assembly coding
- · The impact of assembly in current PL's
- The importance of memory address sharing
- The relevance of ASSEMBLY in hardware communication

This ASSESSEMENT is worth 20 points and will be added to your FINAL SCORES

Prepared by/ Date (Faculty Member)	Reviewed by/ Date (Program Chair)
DENNIS A. MARTILLANO/ Nov 3, 2020	A THOMPSENS LUNCH