



CSE 331L / EEE 332L

Microprocessor Interfacing & Embedded System

Section: 5, Fall 2020

Final Exam

Total marks: 40

Time: 2:40 pm to 5:50 pm

Instructions

1. You all have to solve both the tasks
2. Plagiarism will lead to negative grading
3. Late submission will cause a penalty. For every 5 minutes, 2 marks will be deducted
4. Name the .asm files according to the task numbers (like: Task1.asm, Task2.asm)
5. Make a folder, use your NSU ID number to name the folder
6. Save both the .asm files in that folder
7. Zip the folder and submit the zipped folder in Google Classroom
8. **Failure to follow the above mentioned instructions will cause a penalty of 5 marks**

Tasks:

***** Strictly follow the input output format shown in the examples *****

1. Suppose you are playing a game where you hunt deers and for each deer, you get a gold coin. When you achieve 16 gold coins, you get one bonus coin. Now write a program in assembly language that takes the total number of deers you have hunted as input and calculates the total number of coins you got at the end of the game. (15 points)

Example 1	Example 2
Number of deers hunted: 73 Total Gold coins: 77	Number of deers hunted: 34 Total Gold coins: 36

2. Write a program in assembly language that can help you determine if a word is a palindrome. The word should be a user input. (Use comments in your program to explain the purpose of each statement) (15 + 10)

Example 1	Example 2	Example 3
Enter a word: tenet It is a palindrome.	Enter a word: Tenet It is not a palindrome.	Enter a word: MoM It is a palindrome.