

## Quiz 1

**Subject :** HMMM

**Advisor :** Res. Assist. (Nebi YILMAZ)

**Due Date :** 22.10.2022 23:00

*Click here to accept your Quiz 1.*

### What is HMMM

HMMM (Harvey Mudd Miniature Machine) is a 16-bit, 23-instruction simulated assembly language with  $2^8=256$  16-bit words of memory. HMMM is written in python, and it is intended as an introduction to assembly coding in general. Programs written in HMMM consist of numbered lines with one instruction per line, and comments.

### Gravity Calculator



If we want to calculate gravity, following equation is used.

**Gravity Calculator:**

$$finalPosition = \frac{gravity * fallingTime * fallingTime}{2} + initialVelocity * fallingTime + initialPosition \quad (1)$$

## Problem Statement

Write a program in Hmmm assembly language that calculates gravity. Gravity constant should be equal to  $-10$ . Initial position, initial velocity and falling time should be taken as input and the output of the program should be the final position.

### Example:

Input: fallingTime=5 initialPosition=0 initialVelocity=0

Output: -125

## Notes

- Do not miss the submission deadline.
- Save all your work until the quiz is graded.
- You can ask your questions via Piazza and you are supposed to be aware of everything discussed on Piazza.
- You can find detailed documentation on Hmmm at <https://www.cs.hmc.edu/~cs5grad/cs5/hmmm/documentation/documentation.html>
- You must submit your work with the file hierarchy as stated below:

→ <STUDENTID>  
→ <quiz1.hmmm>