# UECM3033 Assignment #1 Report

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## Task 1 -- setup a github repository

The reports, codes and supporting documents are uploaded to Github at:

[https://github.com/11wei/UECM3033\_assign1](https://github.com/your_github_id/UECM3033_assign1)

## Task 2 -- setup python

python.png

## Task 3 -- modify and run Python script

In this section, I have learn how to create a function in a python and execute it. During this process, I include some basic operation such as, sympy -- a Python library for symbolic mathematic. Moreover, operation numpy -- is the fundamental package for scientific computing with Python, it contain among other useful tools such as, integration, differentiation, linear algebra and etc.

On the other hand, I have learn how to change decimal base into hexadecimal base using hex function. Besides, I have learn the basic mathematic syntax in Python, and created a integral. Last but not least, I have learn to create matrix using array function. The following is the output of this assignment:-

1. The hexadecimal value of my student ID is 0x13e75e
2. The definite integrals that I have chose is
3. The 10 linear equation of my assignment is:-

x0 + 4x1 + 6x2 + 3x3 + 6x4 + 8x5 + 2x6 + 4x7 + 7x8 + 5x9 = 1

3x0 + 2x1 + 4x2 + 5x3 + 6x4 + 7x5 + 5x6 + 3x7 + 1x8 + 3x9 = 2

2x0 + 3x1 + 5x2 + 6x3 + 7x4 + 5x5 + 3x6 + 2x7 + 4x8 + 5x9 = 7

3x0 + 6x1 + 7x2 + 5x3 + 3x4 + x5 + 3x6 + 4x7 + 5x8 + 7x9 = 6

4x0 + 5x1 + 6x2 + 4x3 + 3x4 + 2x5 + 4x6 + 5x7 + 6x8 + 7x9 = 5

6x0 + 8x1 + 6x2 + 3x3 + 4x4 + 6x5 + 7x6 + 5x7 + 4x8 + 5x9 = 4

3x0 + 4x1 + 6x2 + 4x3 + 3x4 + 2x5 + 3x6 + 5x7 + 6x8 + 7x9 = 3

4x0 + 5x1 + 3x2 + 2x3 + 4x4 + 5x5 + 3x6 + 3x7 + 4x8 + 5x9 = 2

5x0 + 3x1 + 3x2 + 5x3 + 6x4 + 8x5 + 6x6 + 4x7 + 3x8 + 2x9 = 1

3x0 + 4x1 + 6x2 + 7x3 + 6x4 + 4x5 + 3x6 + 2x7 + 3x8 + 4x9 = 5

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