

# Module 1 – Final Assessment

[Note: You are required to submit your code in a Word document by sending it to [umairjavaidmanj@gmail.com](mailto:umairjavaidmanj@gmail.com)]

1. Develop a program that receives the following parameters as input:
  - a. Sender's email address
  - b. Recipient's email address
  - c. Email subject
  - d. Message body
  - e. Nonce

Concatenates all the input parameters into a string variable.

Continuously calculates the SHA-256 hash of the string by incrementing the nonce until the first two hexadecimal digits are "ff". Additionally, the program should maintain a record of the number of attempts it took to achieve this specified difficulty level.

2. Repeat the aforementioned task, but this time increase the difficulty level by continuing the hashing process until the first four hexadecimal digits are "ffff".
3. Provide an analysis of your observations regarding the differences between task 1 and task 2.