



**CYPRUS INTERNATIONAL UNIVERSITY**  
Department of Computer Engineering

CPE526 Operating System and Network Security

**Assignment IV**

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This assignment is the implementation of a primality Test on any given number. We shall use the simple way of finding factors of a number and also implement the Miller-Rabin primality test algorithm.

In my implementation of the aforementioned algorithm. The program was written in Python using the Anaconda Framework on a Jupyter Notebook. We started by dividing the task into various steps.

These steps include;

1. Creating a simple method of finding the factors of any given number and recording the number of iterations
2. Create a Miller-Rabin function for finding the factors of any given number and recording the number of iterations
3. Create getFactor function to get the factors of the number after primality test has been carried out
4. Create Main Method Program to allow user input and system output.

The program written in python for the implementation of a primality test using both simple and Miller-Rabin algorithms can be found [here](#)