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CSC 447.001

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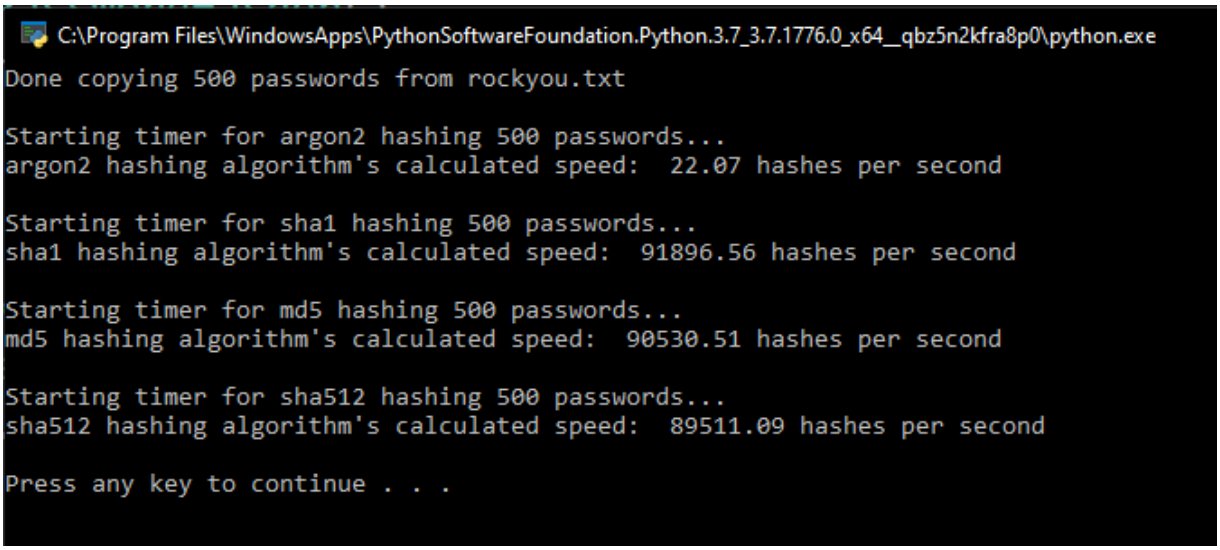
Lab 1: Password Hashing

System Specs used in Test:

CPU: AMD Ryzen 7 3800x 8-Core Processor 4.20 GHz

RAM: 32.0 GB



	Argon2	Sha1	Md5	Sha512
Hashes/s	22.07	91,189.56	90,530.51	89,511.09

Hashing Algorithm breakdown:

1. list = 500 passwords from rockyou.txt
2. Hashing function:
    a. Determine which hash function was called (md5, sha1, ext…)
    b. For each string stored in a specified password list:
        i. Create hash object
        ii. Update hash object with byte string in list
        iii. Store the hex digest in a temporary string.
3. For each hashing algorithm:
    a. Call Timer function of the timeit module to calculate time to hash list
    b. Calculate hashes per second: length of list / time