

readme

倪浚桐

202022161224

Lab7-progarm1

macOS Monterey 12.0.1

Pycharm 11.0.12 x86-64

Python 3.9.5

```
运行: main (1) x
/Users/lingfeng/Desktop/python/venv/bin/python /Users/lingfeng/Desktop/python/202022161224-倪浚桐-Lab7/Program1/main.py
d131dd02c5e9ec4693d90de98c9ff95c2fcd050712467eab4004583e08fb7f8955ad340e09f4b30283e4888325f1415a085125e8f7cdc99fd91d0d72
MD5 digest of the input:
79054025255fb1a26e4bc422aef54eb4
b'eQVAJSVfsaJuS8QirvV0tA=='
SHA256 digest of the input:
b9fef2a8fc93b05e7701e97196fda6c4fb6ea25ff8e64fdfee7015eca8fa617d
b'uf7yqPyTsF53AeLxLv2mxPvu0L/45k/f7nAV7Kj6YX0='
```

```
1 import hashlib
2 import base64
3
4 hex_string: str = input()
5
6 byte_array: bytes = bytes.fromhex(hex_string)
7
8 # MD5
9 md5 = hashlib.md5()
10 md5.update(byte_array)
11 print("MD5 digest of the input:")
12 print(md5.hexdigest())
13 print(base64.b64encode(md5.digest()))
14
15 # SHA256
16 SHA256 = hashlib.sha256()
17 SHA256.update(byte_array)
18 print("SHA256 digest of the input:")
19 print(SHA256.hexdigest())
20 print(base64.b64encode(SHA256.digest()))
```