

PROGRAM - 3

Q3 Write a Python program that defines a function and takes a password string as input and returns its SHA- 256 hashed representation as a hexadecimal string.

Source Code -

```
import hashlib

def hash_password(password: str) -> str:
    password_bytes = password.encode('utf-8')
    sha256_hash = hashlib.sha256()
    sha256_hash.update(password_bytes)
    return sha256_hash.hexdigest()

if __name__ == "__main__":
    password = input("Enter a password: ")

    hashed_password = hash_password(password)
    print(f"SHA-256 Hashed Password: {hashed_password}")
```

OUTPUT -

```
===== RESTART: C:/python 37/q3dse.py =====
Enter a password: hello world
SHA-256 Hashed Password: b94d27b9934d3e08a52e52d7da7dabfac484efe37a5380ee9088f7ace2efcde9
>>>
```
