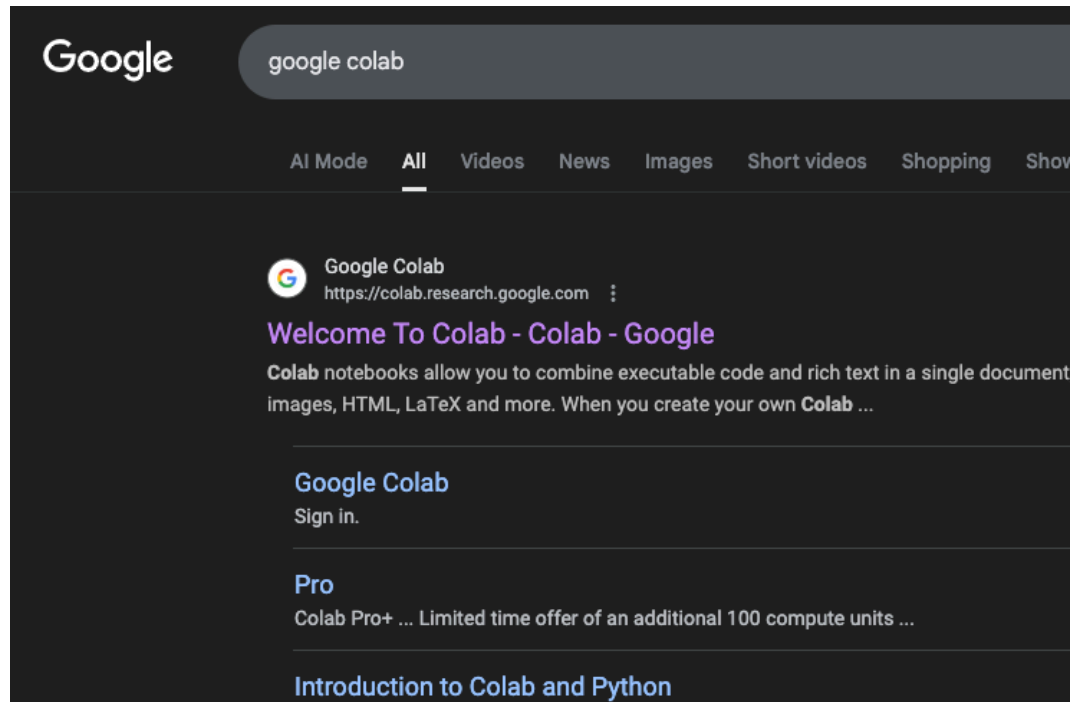
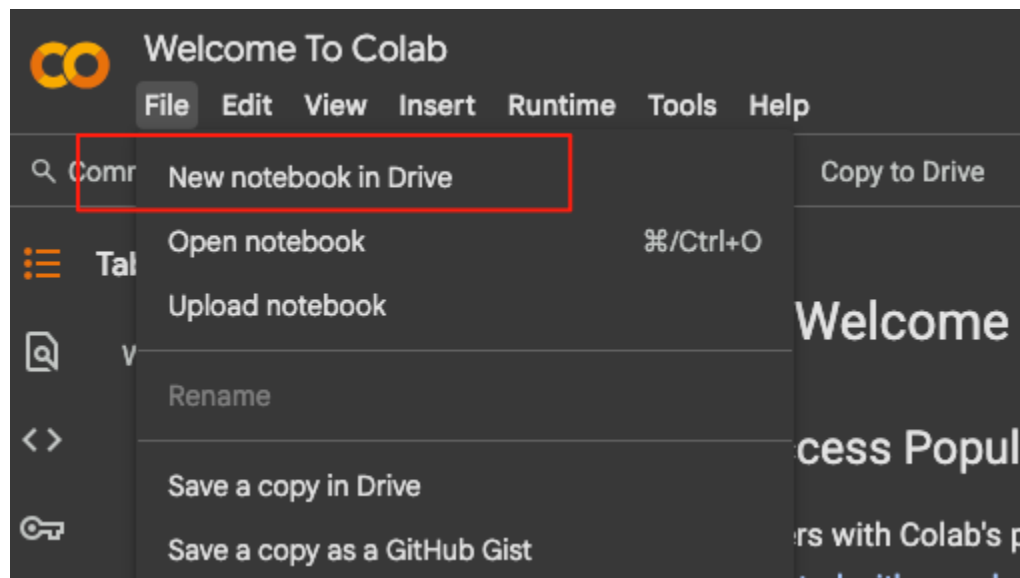


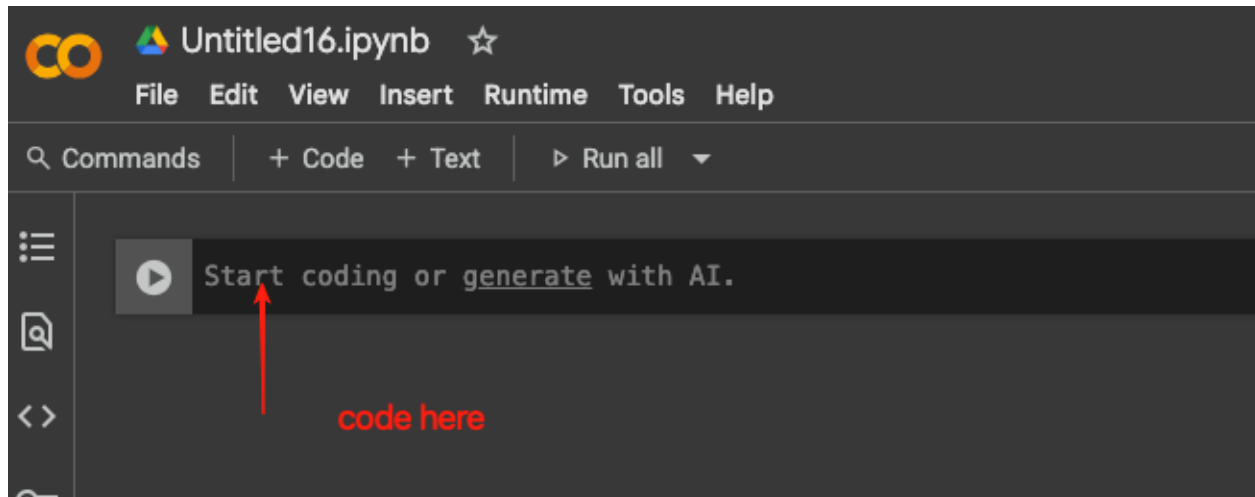
1 Register a user of Google Colab



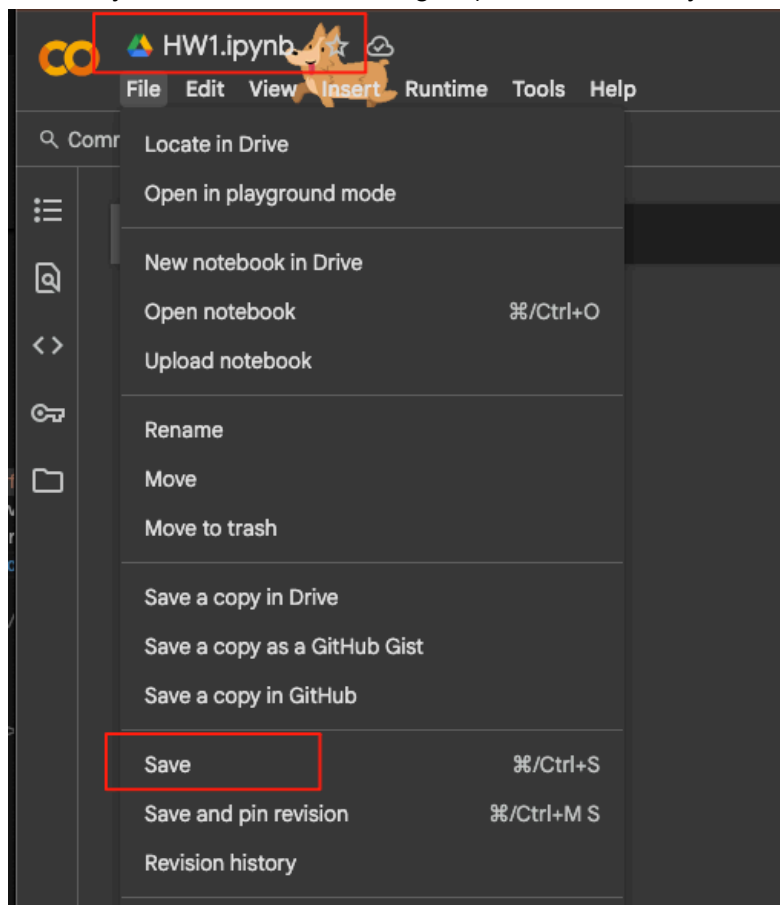
2 Create a new notebook




3 Enter the notebook and start coding.



4, Save your code before closing it. (Give a name of your notebook)



5 install package of crypto

```
 %pip install cryptography      install the cryptography
➦ Requirement already satisfied: cryptography in /usr/local/lib/python3.12/dist-packages (43.0.0)
Requirement already satisfied: cffi>=1.12 in /usr/local/lib/python3.12/dist-packages (from cryptography)
Requirement already satisfied: pycparser in /usr/local/lib/python3.12/dist-packages (from cffi>=1.12->cryptography)
```

Copy the code!

```
%pip install cryptography
```

Copy it into your Colab.

```
import base64
from cryptography.hazmat.primitives.ciphers.aead import AESGCM

def b64decode_padded(s: str) -> bytes:

    s = s.strip()
    missing = (-len(s)) % 4
    if missing:
        s += "=" * missing
    return base64.b64decode(s)

def decrypt_homework(ciphertext_b64: str, key_b64: str, nonce_b64: str,
aad_b64: str) -> str:
    key = b64decode_padded(key_b64)
    nonce = b64decode_padded(nonce_b64)
    aad = b64decode_padded(aad_b64)
    ciphertext = b64decode_padded(ciphertext_b64)
    aesgcm = AESGCM(key)
    plaintext = aesgcm.decrypt(nonce, ciphertext, aad)
    return plaintext.decode("utf-8")

key_b64 = "put your key here"
aad_b64 = "put your aad here"
nonce_b64 = "put your nonce here"
ciphertext_b64 = (
    "put the ciphertext here"
)
```

```
if __name__ == "__main__":
    try:
        plain = decrypt_homework(ciphertext_b64, key_b64, nonce_b64,
aad_b64)
        print("✅ Successfully Decrypted:\n")
        print(plain)
    except Exception as e:
        print("❌ Failed: ", repr(e))
```