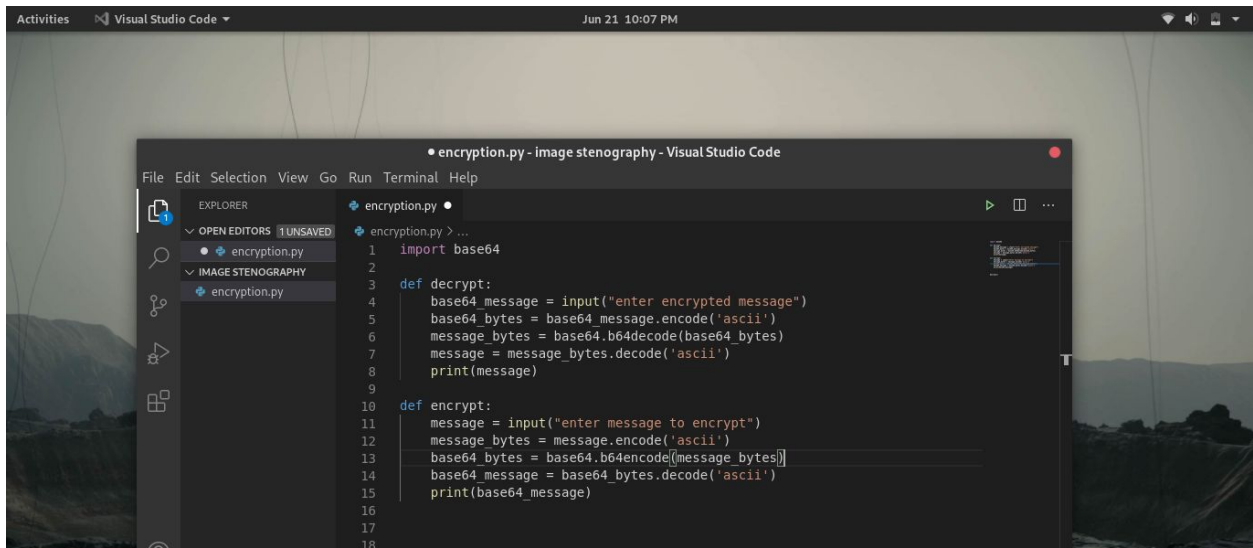


Weekly project report

Project : Image Steganography

The techniques for secret hiding of messages in an otherwise innocent looking carrier message belong to the field of steganography. The purpose of steganography is to conceal the very presence of secret information. To make the communication more secure, the secret information can be compressed and encrypted before it is hidden in the carrier. This is important because in this way we minimize the amount of information that is to be sent, and it is also easier to hide a random looking message into the carrier than to hide a message with a high degree of regularity. Encrypting the compressed message before hiding is recommended and provides double protection.

- For the encryption purpose I am using base64 encoding as it is faster and easier to implement and also it is available as a preinstalled library with python.
- I have studied [PIL\(python image library\)](#) to process this encryption with images.
- Uptil now text encryption is completed using base64 and i am working for hiding text under image and learning tkinter for GUI.

A screenshot of a Visual Studio Code editor window. The title bar reads "encryption.py - image steganography - Visual Studio Code". The interface shows a sidebar on the left with the "EXPLORER" view containing a folder named "IMAGE STEGANOGRAPHY" with a file "encryption.py" inside. The main editor area displays the code for "encryption.py". The code includes imports for 'base64' and 'sys', and defines two functions: 'decrypt' and 'encrypt'. The 'decrypt' function takes an encrypted message as input, decodes it from base64, and prints the original message. The 'encrypt' function takes a message as input, encodes it to base64, and prints the encoded message. The code is as follows:

```
1 import base64
2
3 def decrypt:
4     base64_message = input("enter encrypted message")
5     base64_bytes = base64_message.encode('ascii')
6     message_bytes = base64.b64decode(base64_bytes)
7     message = message_bytes.decode('ascii')
8     print(message)
9
10 def encrypt:
11     message = input("enter message to encrypt")
12     message_bytes = message.encode('ascii')
13     base64_bytes = base64.b64encode(message_bytes)
14     base64_message = base64_bytes.decode('ascii')
15     print(base64_message)
16
17
18
```