Steganography in Image Processing

Developed by : Prashant Saraswat

1. Encryption

Image Taken to hide the message :

Enc. Image after hiding the message :

First 5X3 RGB values of image :

```
[
  [[70, 64, 50], [68, 67, 46], [64, 71, 37],
  [[65, 62, 43], [60, 63, 36], [54, 66, 26],
  [[70, 75, 43], [62, 72, 35], [52, 70, 20],
  [[80, 93, 50], [71, 87, 40], [59, 83, 23],
  [[84, 103, 48], [77, 98, 39], [65, 94, 27],
]
```

First 5X3 RGB values of Enc. image :

```
[
  [[65, 66, 48], [68, 67, 46], [64, 71, 37],
  [[67, 63, 42], [60, 63, 36], [54, 66, 26],
  [[70, 74, 42], [62, 72, 35], [52, 70, 20],
  [[82, 89, 50], [71, 87, 40], [59, 83, 23],
  [[87, 99, 51], [77, 98, 39], [65, 94, 27],
]
```
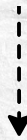
Encryption :

```
Enter your secret message:
Hey, I'm trapped.
Please! Enter Secret Key:
243
```

Steganography in Image Processing

Developed by : Prashant Saraswat

2. Decryption

Read the Encrypted image :

Enter the secret key :

```
>> Decryp
Enter your secret key:
243
```

Get the secret message :

```
message =

  1x17 string array

   "H"    "e"    "y"    ","    " "    "I"    "'"    "m"    " "    "t"    "r"    "a"    "p"    "p"    "e"    "d"    "."
```

Short Description About the Project :

- This project hides a secret message inside an image by slightly changing its pixel colors.
- The message is encrypted using a secret key and stored in the least important parts of the pixels.
- To view the hidden message, the image is processed to extract the changes in the pixels.
- The secret message is then decrypted using the same key, revealing the original content.
- This method ensures secure communication by embedding messages in images, making it hard to detect.