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ISF REPORT OF MINI-PROJECT

Code:—>

```
from Crypto.Cipher import AES
from Crypto.Random import get_random_bytes
from Crypto.Util.Padding import pad, unpad
from PIL import Image

# Function to encrypt an image
def encrypt_image(input_image_path, output_image_path, key):
    try:
        with open(input_image_path, 'rb') as input_file:
            image_data = input_file.read()

            cipher = AES.new(key, AES.MODE_ECB)
            ciphertext = cipher.encrypt(pad(image_data, AES.block_size))

            with open(output_image_path, 'wb') as output_file:
                output_file.write(ciphertext)

            print(f'Image encrypted successfully to {output_image_path}')
    except Exception as e:
        print(f'Error encrypting image: {str(e)}')

# Function to decrypt an image
def decrypt_image(input_image_path, output_image_path, key):
    try:
        with open(input_image_path, 'rb') as input_file:
            ciphertext = input_file.read()

            cipher = AES.new(key, AES.MODE_ECB)
            decrypted_data = unpad(cipher.decrypt(ciphertext), AES.block_size)

            with open(output_image_path, 'wb') as output_file:
                output_file.write(decrypted_data)

            print(f'Image decrypted successfully to {output_image_path}')
    except Exception as e:
        print(f'Error decrypting image: {str(e)}')

# Main program if
__name__ == "__main__":
```

```
input_image_path = 'input_image.png' # Replace with your input image path
encrypted_image_path = 'encrypted_image.enc'
decrypted_image_path = 'decrypted_image.png' # Replace with your output image path
key = get_random_bytes(16) # 16 bytes (128 bits) key, change it as needed
encrypt_image(input_image_path, encrypted_image_path, key)
decrypt_image(encrypted_image_path, decrypted_image_path, key)
```