

SOURCE CODE

App.py

```
from flask import Flask, render_template, request, session, flash, send_file
from ecies.utils import generate_key
from ecies import encrypt, decrypt
import mysql.connector
import base64, os
```

```
app = Flask(__name__)
app.config['SECRET_KEY'] = 'aaa'
```

```
@app.route('/')
def home():
    return render_template('index.html')
```

```
@app.route('/EdgeServerLogin')
def EdgeServerLogin():
    return render_template('EdgeServerLogin.html')
```

```
@app.route('/TTPLLogin')
def TTPLLogin():
    return render_template('TTPLLogin.html')
```

```
@app.route('/HealthCareLogin')
def HealthCareLogin():
    return render_template('HealthCareLogin.html')
```

```
@app.route('/NewHealthCare')
def NewHealthCare():
    return render_template('NewHealthCare.html')
```

```
@app.route("/ttplogin", methods=['GET', 'POST'])
def ttplogin():
    error = None
    if request.method == 'POST':
        if request.form['uname'] == 'admin' and request.form['password'] ==
'admin':
```

```
        conn = mysql.connector.connect(user='root', password="",
host='localhost', database='1vsecureobjectdb')
        cur = conn.cursor()
        cur.execute("SELECT * FROM regtb where status='waiting'")
        data = cur.fetchall()
```

```
        return render_template('TTPHome.html', data=data)
```

```
    else:
        flash("UserName or Password Incorrect!")
        return render_template('TTPLogin.html')
```

```
@app.route("/TTPHome")
def TTPHome():
    conn = mysql.connector.connect(user='root', password="", host='localhost',
database='1vsecureobjectdb')
    cur = conn.cursor()
    cur.execute("SELECT * FROM regtb where status='waiting' ")
    data = cur.fetchall()
    return render_template('TTPHome.html', data=data)
```

```
@app.route("/RejectInfo")
def TRejectInfo():
    conn = mysql.connector.connect(user='root', password="", host='localhost',
database='1vsecureobjectdb')
    cur = conn.cursor()
    cur.execute("SELECT * FROM regtb where status='Rejected' ")
    data = cur.fetchall()
    return render_template('TRejectInfo.html', data=data)
```

```
@app.route("/ApprovedInfo")
def TApprovedInfo():
    conn = mysql.connector.connect(user='root', password="", host='localhost',
database='1vsecureobjectdb')
    cur = conn.cursor()
    cur.execute("SELECT * FROM regtb where status='Approved' ")
```

```
data = cur.fetchall()

return render_template('TApprovedInfo.html', data=data)
```

```
@app.route("/Approved")
def Approved():
    id = request.args.get('id')

    conn = mysql.connector.connect(user='root', password="", host='localhost',
database='1vsecureobjectdb')

    cursor = conn.cursor()

    cursor.execute("Update regtb set Status='Approved' where id='" + id + "' ")
    conn.commit()
    conn.close()


    conn = mysql.connector.connect(user='root', password="", host='localhost',
database='1vsecureobjectdb')

    cur = conn.cursor()
    cur.execute("SELECT * FROM regtb where status='waiting'")
    data = cur.fetchall()
    flash("Health Care Approved!")
    return render_template('TTPHome.html', data=data)
```

```
@app.route("/Reject")
def Reject():
    id = request.args.get('id')

    conn = mysql.connector.connect(user='root', password="", host='localhost',
database='1vsecureobjectdb')
```

```

cursor = conn.cursor()
cursor.execute("Update regtb set Status='Rejected' where id='" + id + "' ")
conn.commit()
conn.close()

```

```

conn = mysql.connector.connect(user='root', password="", host='localhost',
database='1vsecureobjectdb')
cur = conn.cursor()
cur.execute("SELECT * FROM regtb where status='waiting'")
data = cur.fetchall()
flash("Health Care  Rejected!")
return render_template('TTPHome.html', data=data)

```

```

@app.route("/serverlogin", methods=['GET', 'POST'])
def serverlogin():
    error = None
    if request.method == 'POST':
        if request.form['uname'] == 'admin' and request.form['password'] ==
'admin':

```

```

        conn = mysql.connector.connect(user='root', password="",
host='localhost', database='1vsecureobjectdb')
        cur = conn.cursor()
        cur.execute("SELECT * FROM regtb ")
        data = cur.fetchall()

        return render_template('ESeverHome.html', data=data)

```

else:

flash("UserName or Password Incorrect!")

return render_template('ESeverHome.html')

@app.route("/ESeverHome")

def ESeverHome():

conn = mysql.connector.connect(user='root', password="", host='localhost',
database='lvsecureobjectdb')

cur = conn.cursor()

cur.execute("SELECT * FROM regtb ")

data = cur.fetchall()

return render_template('ESeverHome.html', data=data)

@app.route("/ESeverFileInfo")

def ESeverFileInfo():

conn = mysql.connector.connect(user='root', password="", host='localhost',
database='lvsecureobjectdb')

cur = conn.cursor()

cur.execute("SELECT * FROM filetb ")

data = cur.fetchall()

return render_template('ESeverFileInfo.html', data=data)

@app.route("/EdgeServerrequest")

def EdgeServerrequest():

conn = mysql.connector.connect(user='root', password="", host='localhost',
database='lvsecureobjectdb')

```

cur = conn.cursor()
cur.execute("SELECT * FROM requesttb ")
data = cur.fetchall()
return render_template('EdgeServerrequest.html', data=data)

@app.route("/newhealth", methods=['GET', 'POST'])
def newhealth():
    if request.method == 'POST':
        name = request.form['uname']
        mobile = request.form['mobile']
        email = request.form['email']
        website = request.form['website']
        address = request.form['Address']
        username = request.form['username']
        password = request.form['password']

        conn = mysql.connector.connect(user='root', password="", host='localhost',
database='l1vsecureobjectdb')

        cursor = conn.cursor()

        cursor.execute(
            "insert into regtb values('" + name + "','" + mobile + "','" + email + "','"
+ website + "','" + address + "','" + username + "','" + password + "','waiting')")

        conn.commit()

        conn.close()

        flash("Record Saved!")

    return render_template('NewHealthCare.html')

```

```

@app.route("/hlogin", methods=['GET', 'POST'])
def hlogin():
    if request.method == 'POST':
        username = request.form['uname']
        password = request.form['password']
        session['hname'] = request.form['uname']

        conn = mysql.connector.connect(user='root', password="", host='localhost',
        database='1vsecureobjectdb')
        cursor = conn.cursor()
        cursor.execute("SELECT * from regtb where username='" + username + "'
and password='" + password + "'")
        data = cursor.fetchone()
        if data is None:
            return render_template('index.html')
            return 'Username or Password is wrong'
        else:
            status = data[8]

            if status == 'waiting':
                flash("waiting for TTP Approved")
                return render_template('HealthCareLogin.html', data=data)
            elif status == 'Rejected':

                flash(" Approved Rejected")
                return render_template('HealthCareLogin.html', data=data)

```



```

else:

    conn = mysql.connector.connect(user='root', password="",
host='localhost', database='lvsecureobjectdb')

    cur = conn.cursor()

    cur.execute("SELECT * FROM regtb where username='" + username
+ "' and password='" + password + "'")

    data = cur.fetchall()

    flash("you are successfully logged in")

    return render_template('HealthCareHome.html', data=data)

```

```

@app.route("/upload", methods=['GET', 'POST'])

```

```

def upload():

```

```

    if request.method == 'POST':

```

```

        from stegano import lsb

```

```

        from PIL import Image

```

```

        name = request.form['uname']

```

```

        mobile = request.form['mobile']

```

```

        email = request.form['email']

```

```

        ano = request.form['ano']

```

```

        address = request.form['Address']

```

```

        import random

```

```

        file = request.files['file']

```

```

        fnew = random.randint(1111, 9999)

```

```

        savename = str(fnew) + ".png"

```

```

file.save("static/upload/" + savename)

import tensorflow as tf

classifierload = tf.keras.models.load_model('model1.h5')

import numpy as np

from keras.preprocessing import image

test_image = image.load_img("static/upload/" + savename,
target_size=(200, 200))

test_image = np.expand_dims(test_image, axis=0)

result = classifierload.predict(test_image)

out = "
pre = "
if result[0][0] == 1:
    out = "Normal"
    pre = "Nil"
elif result[0][1] == 1:
    out = "Varicose"

    pre = "Drugs used to treat Varicose Veins ; Expand current row for
information about polidocanol polidocanol, 4.7, 3 reviews for polidocanol to
treat Varicose Veins."

hidedata = "DiseaseName :" + out + " prescription :" + pre

image = Image.open("./static/upload/" + savename)
print(f"Original size : {image.size}") # 5464x3640

sunset_resized = image.resize((400, 400))

```

```
sunset_resized.save("./static/upload/" + savename)
```

```
secret = lsb.hide("./static/upload/" + savename, hidedata)
```

```
pathname, extension = os.path.splitext("./static/upload/" + savename)
```

```
filename = pathname.split('/')
```

```
imageName = filename[-1] + ".png"
```

```
sname = filename[-1]
```

```
secret.save("./static/Encode/" + imageName)
```

```
savedir = 'static/Split/'
```

```
filename = "./static/Encode/" + imageName
```

```
img = Image.open(filename)
```

```
width, height = img.size
```

```
start_pos = start_x, start_y = (0, 0)
```

```
cropped_image_size = w, h = (200, 200)
```

```
frame_num = 1
```

```
for col_i in range(0, width, w):
```

```
    for row_i in range(0, height, h):
```

```
        crop = img.crop((col_i, row_i, col_i + w, row_i + h))
```

```
        save_to = os.path.join(savedir, sname + "_{:02}.png")
```

```
        crop.save(save_to.format(frame_num))
```

```
        frame_num += 1
```

```
secp_k = generate_key()
```

```
privhex = secp_k.to_hex()
```

```
pubhex = secp_k.public_key.format(True).hex()
```

```
filepath1 = "./static/Split/" + sname + "_01.png"
```

```
filepath2 = "./static/Split/" + sname + "_02.png"
```

```
filepath3 = "./static/Split/" + sname + "_03.png"
```

```
filepath4 = "./static/Split/" + sname + "_04.png"
```

```
newfilepath1 = "./static/Encrypt/" + sname + "_01.png"
```

```
newfilepath2 = "./static/Encrypt/" + sname + "_02.png"
```

```
newfilepath3 = "./static/Encrypt/" + sname + "_03.png"
```

```
newfilepath4 = "./static/Encrypt/" + sname + "_04.png"
```

```
data1 = 0
```

```
data2 = 0
```

```
data3 = 0
```

```
data4 = 0
```

```
with open(filepath1, "rb") as File:
```

```
    data1 = base64.b64encode(File.read()) # convert binary to string data to  
read file
```

```
with open(filepath2, "rb") as File:
```

```
    data2 = base64.b64encode(File.read())
```

```
with open(filepath3, "rb") as File:
```

```
    data3 = base64.b64encode(File.read())
```

```
with open(filepath4, "rb") as File:
```

```
    data4 = base64.b64encode(File.read())
```

```
print("Private_key:", privhex, "\nPublic_key:", pubhex, "Type: ",
type(privhex))
```

```
if (privhex == 'null'):
```

```
    flash('Please Choose Another File,file corrupted!')
```

```
    return render_template('Hupload.html')
```

```
else:
```

```
    encrypted_secp = encrypt(pubhex, data1)
```

```
    with open(newfilepath1, "wb") as EFile:
```

```
        EFile.write(base64.b64encode(encrypted_secp))
```

```
    encrypted_secp = encrypt(pubhex, data2)
```

```
    with open(newfilepath2, "wb") as EFile:
```

```
        EFile.write(base64.b64encode(encrypted_secp))
```

```
    encrypted_secp = encrypt(pubhex, data3)
```

```
    with open(newfilepath3, "wb") as EFile:
```

```
        EFile.write(base64.b64encode(encrypted_secp))
```

```
    encrypted_secp = encrypt(pubhex, data4)
```

```
    with open(newfilepath4, "wb") as EFile:
```

```
        EFile.write(base64.b64encode(encrypted_secp))
```

```
    conn = mysql.connector.connect(user='root', password="",
host='localhost', database='lvsecureobjectdb')
```

```
    cursor = conn.cursor()
```

```

        cursor.execute(
            "INSERT INTO filetb VALUES ('" + session[
                'hname'] + "','" + name + "','" + mobile + "','" + email + "','" + ano +
                "','" + address + "','" + sname + "','" + savename + "','" + pubhex + "','" + privhex
                + "')"
        )
        conn.commit()
        conn.close()
        flash(hidedata)

    return render_template('HUploadIfo.html', iname=savename, pre=hidedata,
        sname=sname, pvkey=privhex)

```

```

@app.route('/Upload')
def Upload():
    return render_template('HUpload.html')

```

```

@app.route('/UploadInfo')
def UploadInfo():
    conn = mysql.connector.connect(user='root', password="", host='localhost',
        database='lvsecureobjectdb')
    cur = conn.cursor()
    cur.execute("SELECT * FROM filetb where HCName='" + session['hname']
        + "' ")
    data = cur.fetchall()
    return render_template('HVUploadInfo.html', data=data)

```

```

@app.route("/View")
def View():
    id = request.args.get('id')

    conn = mysql.connector.connect(user='root', password="", host='localhost',
database='1vsecureobjectdb')
    cursor = conn.cursor()
    cursor.execute("SELECT * FROM filetb where id='" + id + "'")
    data = cursor.fetchone()

    if data:
        fid = data[8]

    else:
        return 'Incorrect username / password !'

    from stegano import lsb
    clear_message = lsb.reveal("static/Encode/"+fid)
    session['dfid'] = fid

    org = 'static/upload/'+fid

    print(clear_message)
    return render_template('Hview.html', iname=org,pre=clear_message )

@app.route("/hdown", methods=['GET', 'POST'])
def hdown():

```

```
if request.method == 'POST':
```

```
    return send_file('static/upload/' + session['dfid'], as_attachment=True)
```

```
@app.route('/HSendrequest')
```

```
def HSendrequest():
```

```
    conn = mysql.connector.connect(user='root', password="", host='localhost',  
database='1vsecureobjectdb')
```

```
    cur = conn.cursor()
```

```
    cur.execute("SELECT * FROM filetb where HCName !=" + session['hname']  
+ " ")
```

```
    data = cur.fetchall()
```

```
    return render_template('HSendrequest.html', data=data)
```

```
@app.route("/send")
```

```
def send():
```

```
    id = request.args.get('id')
```

```
    conn = mysql.connector.connect(user='root', password="", host='localhost',  
database='1vsecureobjectdb')
```

```
    cursor = conn.cursor()
```

```
    cursor.execute("SELECT * FROM filetb where id=" + id + "")
```

```
    data = cursor.fetchone()
```

```
if data:
```

```
    hname = data[1]
```

```
    pname = data[2]
```

```
    iname = data[8]
```



```

        iid = data[7]
        pkey = data[10]
    else:
        return 'Incorrect username / password !'

    conn = mysql.connector.connect(user='root', password="", host='localhost',
database='1vsecureobjectdb')

    cursor = conn.cursor()

    cursor.execute(
        "INSERT INTO requesttb VALUES ('" + id + "','" + hname + "','" +
pname + "','" + iname + "','" + iid + "','" + pkey + "','" + session['hname'] +
"', 'waiting')")

    conn.commit()

    conn.close()

    flash("Key Request Send")

    return render_template('HSendrequest.html')

```

```

@app.route('/HStatus')

```

```

def HStatus():

```

```

    conn = mysql.connector.connect(user='root', password="", host='localhost',
database='1vsecureobjectdb')

    cur = conn.cursor()

    cur.execute("SELECT * FROM requesttb where RHCName='" +
session['hname'] + "' And Status='waiting' ")

    data = cur.fetchall()

```

```

    conn = mysql.connector.connect(user='root', password="", host='localhost',
database='lvsecureobjectdb')

    cur = conn.cursor()

    cur.execute("SELECT * FROM requesttb where RHCName ='' +
session['hname'] + '' And Status !='waiting' ")

    data1 = cur.fetchall()


    return render_template('HStatus.html', data=data, data1=data1)

```

```

@app.route('/HAccept')

```

```

def HAccept():

```

```

    conn = mysql.connector.connect(user='root', password="", host='localhost',
database='lvsecureobjectdb')

    cur = conn.cursor()

    cur.execute("SELECT * FROM requesttb where HCName ='' +
session['hname'] + '' And Status='waiting' ")

    data = cur.fetchall()

```

```

    conn = mysql.connector.connect(user='root', password="", host='localhost',
database='lvsecureobjectdb')

    cur = conn.cursor()

    cur.execute("SELECT * FROM requesttb where HCName ='' +
session['hname'] + '' And Status !='waiting' ")

    data1 = cur.fetchall()

```

```
return render_template('HAccept.html', data=data, data1=data1)
```

```
@app.route("/rApproved")
```

```
def rApproved():
```

```
    id = request.args.get('id')
```

```
    conn = mysql.connector.connect(user='root', password="", host='localhost',  
database='1vsecureobjectdb')
```

```
    cursor = conn.cursor()
```

```
    cursor.execute("SELECT * FROM requesttb where id='" + id + "'")
```

```
    data = cursor.fetchone()
```

```
    if data:
```

```
        pkey = data[6]
```

```
        rhcname = data[7]
```

```
    else:
```

```
        return 'Incorrect username / password !'
```

```
    conn = mysql.connector.connect(user='root', password="", host='localhost',  
database='1vsecureobjectdb')
```

```
    cursor = conn.cursor()
```

```
    cursor.execute("SELECT * FROM regtb where username='" + rhcname +  
"'"")
```

```
    data = cursor.fetchone()
```

if data:

 mailid = data[3]

else:

 return 'Incorrect username / password !'

msg = "Request Id "+id + " Private key :"+pkey

sendmsg(mailid ,msg)

conn = mysql.connector.connect(user='root', password="", host='localhost',
database='lvsecureobjectdb')

cursor = conn.cursor()

cursor.execute("Update requesttb set Status='Approved' where id='" + id + "
")

conn.commit()

conn.close()

conn = mysql.connector.connect(user='root', password="", host='localhost',
database='lvsecureobjectdb')

cur = conn.cursor()

cur.execute("SELECT * FROM requesttb where HCName='" +
session['hname'] + "' And Status='waiting' ")

data = cur.fetchall()

conn = mysql.connector.connect(user='root', password="", host='localhost',
database='lvsecureobjectdb')

```
cur = conn.cursor()

cur.execute("SELECT * FROM requesttb where HCName ='" +
session['hname'] + "' And Status !='waiting' ")

data1 = cur.fetchall()
```

```
return render_template('HAccept.html', data=data, data1=data1)
```

```
@app.route("/rReject")
```

```
def rReject():
```

```
    id = request.args.get('id')
```

```
    conn = mysql.connector.connect(user='root', password="", host='localhost',
database='lvsecureobjectdb')
```

```
    cursor = conn.cursor()
```

```
    cursor.execute("Update requesttb set Status='Rejected' where id='" + id + "' ")
```

```
    conn.commit()
```

```
    conn.close()
```

```
    conn = mysql.connector.connect(user='root', password="", host='localhost',
database='lvsecureobjectdb')
```

```
    cursor = conn.cursor()
```

```
    cursor.execute("SELECT * FROM requesttb where id='" + id + "'")
```

```
    data = cursor.fetchone()
```

```
    if data:
```

```
        pkey = data[6]
```

```

        rhcname = data[7]
    else:
        return 'Incorrect username / password !'

    conn = mysql.connector.connect(user='root', password="", host='localhost',
database='1vsecureobjectdb')
    cursor = conn.cursor()
    cursor.execute("SELECT * FROM regtb where username='" + rhcname +
    "'")
    data = cursor.fetchone()

    if data:
        mailid = data[3]

    else:
        return 'Incorrect username / password !'

    msg = "Request Reject "
    sendmsg(mailid, msg)

    conn = mysql.connector.connect(user='root', password="", host='localhost',
database='1vsecureobjectdb')
    cur = conn.cursor()
    cur.execute("SELECT * FROM requesttb where HCName ='" +
    session['hname'] + "' And Status='waiting' ")
    data = cur.fetchall()

    conn = mysql.connector.connect(user='root', password="", host='localhost',
database='1vsecureobjectdb')

```

```

cur = conn.cursor()

cur.execute("SELECT * FROM requesttb where HCName ='" +
session['hname'] + "' And Status !='waiting' ")

data1 = cur.fetchall()


return render_template('HAccept.html', data=data, data1=data1)

```

```

@app.route("/ViewImage")
def ViewImage():
    id = request.args.get('id')

    session["rhcid"] = id

    conn = mysql.connector.connect(user='root', password="", host='localhost',
database='1vsecureobjectdb')

    cursor = conn.cursor()

    cursor.execute("SELECT * FROM requesttb where id='" + id + "'")
    data = cursor.fetchone()

    if data:
        status = data[8]

    else:
        return 'Incorrect username / password !'

    if status == "Approved":
        return render_template('HDecrypt.html')

```

else:

flash('Your Request Ins Rejected!')

return render_template('HStatus.html')

@app.route("/imdecrypt", methods=['GET', 'POST'])

def imdecrypt():

if request.method == 'POST':

prikey = request.form['prikey']

conn = mysql.connector.connect(user='root', password="", host='localhost',
database='lvsecureobjectdb')

cursor = conn.cursor()

cursor.execute("SELECT * FROM requesttb where id='" +
session["rhcid"] + "'")

data = cursor.fetchone()

if data:

imid = data[5]

tpriKey = data[6]

else:

return 'Incorrect username / password !'

if prikey == tpriKey:


```
filepath1 = "./static/Encrypt/" + imid + "_01.png"
```

```
filepath2 = "./static/Encrypt/" + imid + "_02.png"
```

```
filepath3 = "./static/Encrypt/" + imid + "_03.png"
```

```
filepath4 = "./static/Encrypt/" + imid + "_04.png"
```

```
newfilepath1 = "./static/Decrypt/" + imid + "_01.png"
```

```
newfilepath2 = "./static/Decrypt/" + imid + "_02.png"
```

```
newfilepath3 = "./static/Decrypt/" + imid + "_03.png"
```

```
newfilepath4 = "./static/Decrypt/" + imid + "_04.png"
```

```
data1 = 0
```

```
data2 = 0
```

```
data3 = 0
```

```
data4 = 0
```

```
privhex = tpriKey
```

```
with open(filepath1, "rb") as File:
```

```
    data1 = base64.b64decode(File.read())
```

```
decrypted_secp = decrypt(privhex, data1)
```

```
with open(newfilepath1, "wb") as DFile:
```

```
    DFile.write(base64.b64decode(decrypted_secp))
```

```
with open(filepath2, "rb") as File:
```

```
    data2 = base64.b64decode(File.read())
```

```
decrypted_secp = decrypt(privhex, data2)
```

```
with open(newfilepath2, "wb") as DFile:
```

```
    DFile.write(base64.b64decode(decrypted_secp))
```

```
with open(filepath3, "rb") as File:
```

```
    data3 = base64.b64decode(File.read())
```

```
decrypted_secp = decrypt(privhex, data3)
```

```
with open(newfilepath3, "wb") as DFile:
```

```
    DFile.write(base64.b64decode(decrypted_secp))
```

```
with open(filepath4, "rb") as File:
```

```
    data4 = base64.b64decode(File.read())
```

```
decrypted_secp = decrypt(privhex, data4)
```

```
with open(newfilepath4, "wb") as DFile:
```

```
    DFile.write(base64.b64decode(decrypted_secp))
```

```
flash('Decrypt Successfully all images')
```

```
return render_template('Hmerge.html', sname=imid)
```

```
else:
```

```
flash('Your private key Incorrect!')
```

```
return render_template('HDecrypt.html')
```

```

@app.route("/mergeim", methods=['GET', 'POST'])
def mergeim():
    if request.method == 'POST':
        from PIL import Image

        conn = mysql.connector.connect(user='root', password="", host='localhost',
        database='1vsecureobjectdb')

        cursor = conn.cursor()

        cursor.execute("SELECT * FROM requesttb where id='" +
        session["rhcid"] + "'")

        data = cursor.fetchone()

        if data:
            imid = data[5]

        else:
            return 'Incorrect username / password !'

        files = [
            "./static/Decrypt/" + imid + "_01.png",
            "./static/Decrypt/" + imid + "_02.png",
            "./static/Decrypt/" + imid + "_03.png",
            "./static/Decrypt/" + imid + "_04.png"]

```

```

result = Image.new("RGB", (400, 400))

for index, file in enumerate(files):
    path = os.path.expanduser(file)
    img = Image.open(path)
    img.thumbnail((200, 200), Image.ANTIALIAS)
    x = index // 2 * 200
    y = index % 2 * 200
    w, h = img.size
    print('pos {0},{1} size {2},{3}'.format(x, y, w, h))
    result.paste(img, (x, y, x + w, y + h))

result.save(os.path.expanduser('static/merge/'+ imid +'.png'))

from stegano import lsb
clear_message = lsb.reveal('static/merge/'+ imid +'.png')

mimage = 'static/merge/'+ imid +'.png'
session['mimage'] = mimage

print(clear_message)

return render_template('HDView.html', iname=mimage,
pre=clear_message)

@app.route("/hvdown", methods=['GET', 'POST'])
def hvdown():

```

```
if request.method == 'POST':
```

```
    return send_file(session['mimage'], as_attachment=True)
```

```
def sendmsg(Mailid,message):
```

```
    import smtplib
```

```
    from email.mime.multipart import MIMEMultipart
```

```
    from email.mime.text import MIMEText
```

```
    from email.mime.base import MIMEBase
```

```
    from email import encoders
```

```
    fromaddr = "projectmailm@gmail.com"
```

```
    toaddr = Mailid
```

```
    # instance of MIMEMultipart
```

```
    msg = MIMEMultipart()
```

```
    # storing the senders email address
```

```
    msg['From'] = fromaddr
```

```
    # storing the receivers email address
```

```
    msg['To'] = toaddr
```

```
    # storing the subject
```

```
    msg['Subject'] = "Alert"
```

```
    # string to store the body of the mail
```

```
body = message

# attach the body with the msg instance
msg.attach(MIMEText(body, 'plain'))

# creates SMTP session
s = smtplib.SMTP('smtp.gmail.com', 587)

# start TLS for security
s.starttls()

# Authentication
s.login(fromaddr, "qmgn xecl bkqv musr")

# Converts the Multipart msg into a string
text = msg.as_string()

# sending the mail
s.sendmail(fromaddr, toaddr, text)

# terminating the session
s.quit()


if __name__ == '__main__':
    app.run(debug=True, use_reloader=True)
```