**Title: OTP Verification System**

import random

import smtplib

def generate\_otp():

    return random.randint(100000, 999999)

def setup\_server():

    server = smtplib.SMTP('smtp.gmail.com', 587)

    server.starttls()

    return server

def email\_verification(email):

    email\_check1 = ["gmail", "hotmail", "yahoo", "outlook"]

    email\_check2 = [".com", ".in", ".org", ".edu", ".co.in"]

    count = 0

    for domain in email\_check1:

        if domain in email:

            count += 1

    for site in email\_check2:

        if site in email:

            count += 1

    if "@" not in email or count != 2:

        return False

    return True

def send\_otp(server, sender\_email, receiver\_email, name, otp):

    subject = "OTP verification using Python"

    body = f"Dear {name},\n\nYour OTP is {otp}."

    message = f'Subject: {subject}\n\n{body}'

    server.sendmail(sender\_email, receiver\_email, message)

    print(f"OTP has been sent to {receiver\_email}")

def prompt\_email():

    while True:

        receiver\_email = input("Enter your email ID: ")

        if email\_verification(receiver\_email):

            return receiver\_email

        print("Invalid email ID. Please try again.")

def main():

    OTP = generate\_otp()

    server = setup\_server()

    sender\_email = "priyanshu25122002@gmail.com"

    password = "stqqwjqoocucknsx"  # This should be securely handled

    server.login(sender\_email, password)

    name = input("Enter your name: ")

    receiver\_email = prompt\_email()

    send\_otp(server, sender\_email, receiver\_email, name, OTP)

    while True:

        try:

            received\_OTP = int(input("Enter OTP: "))

            if received\_OTP == OTP:

                print("OTP verified congratulations")

                break

            else:

                print("Invalid OTP")

                if input("Enter 'yes' to resend OTP on same email or 'no' to enter a new email ID: ").strip().lower() == 'yes':

                    OTP = generate\_otp()

                    send\_otp(server, sender\_email, receiver\_email, name, OTP)

                else:

                    receiver\_email = prompt\_email()

                    OTP = generate\_otp()

                    send\_otp(server, sender\_email, receiver\_email, name, OTP)

        except ValueError:

            print("Please enter a valid number.")

    server.quit()

if \_\_name\_\_ == "\_\_main\_\_":

    main()