

Name - Navya Negi

Course - BCA

Roll no. - 08

Sec - B

University Roll no. - 1121088

Subject - Information security and cyber laws

Practicals.

Q-1 → Find any 3 security aspects of the Google Account.

⇒ 1) Check out for google safety tips.

Step 1: Log to your Google Account.

Step 2: Go to Help Option where you find tips related to your google account.

Step 3: Following are the options comes under in help:

1. Help with common issues like control and recover of data.

Guiding steps for adding privacy, account protection and finding your device.

Discuss your problems related to your google account with other peoples who use the same service as you.

You can report your issues and get solution for that.

You can also give feedback to your google services.

2) Check for Account Recovery.

Step 1: Log to your Google Account.

Step 2: Go to Security Option.

Step 3: Click on Recovery Phone and Recovery Email one by one.

Step 4: First you have to sign in again to your Google Account for verification.

Step 5: Now you can recover your account by adding Phone Number and Email one by one.

Step 6: By adding this, you can recover your account easily.

Step 7: Account Recover successfully.

3) Check for Account Security.

Step 1: Log to your Google Account.

Step 2: Go to security option.

Step 3: You have following options under Google Security Option:

1. signing in to Google with the help of strong password and two step verification method.

Adding phone number and email for recovery of account.

Can also check recently security events.

check devices where the account has currently signed in and in last 28 days with this option you can find your device also.

check third-party apps with account access.

Q-4 → Write a program to implement OTP (One Time Password).

⇒ Objective - To generate a OTP (8 digit, using Math.ceil).

Source Code.

⇒ import math, random

def OTP():

x = "0123456789"

OTP = ""

for i in range(8):

OTP += x[math.ceil(random.random()*10)]

return OTP

if __name__ == "__main__":

print("OTP of 8 digits : ", OTP())

Q-5 → Write a program to implement encryption and decryption using Caesar Cipher on the input plaintext = "Attack from North"

⇒ Objective - To understand the encryption and decryption using caesar cipher.

Encrypt

def encrypt(string):

cipher = ""

for char in string:

if char == ' ':

Signature

```

cipher = cipher + char
elif char.isupper():
    cipher = cipher + chr((ord(char) + 3 - 65) % 26 + 65)
else:
    cipher = cipher + chr((ord(char) + 3 - 97) % 26 + 97)
return cipher
text = input("enter string:")
print("original string:", text)
print("after encryption:", encrypt(text))

```

Decrypt

```

def decrypt(string):
    plain = ""
    for char in string:
        if char == ' ':
            plain += char
        elif char.isupper():
            plain = plain + chr((ord(char) - 3 - 65) % 26 + 65)
        else:
            plain = plain + chr((ord(char) - 3 - 97) % 26 + 97)
    return plain
text = input("enter cipher string:")
print("cipher string:", text)
print("after decryption:", decrypt(text))

```