

ASSIGNMENT NO: 02

/*

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*/

Problem Statement:

Write a program in C++ /Python to analyse an email header

Objectives:

1. To obtain email headers.

Code:

```
import imaplib
```

```
import email
```

```
from email.header import decode_header
```

```
from argparse import ArgumentParser
```

```
parser = ArgumentParser(description="Get email using imap")
```

```
parser.add_argument("-u", "--username", help="Gmail Address", type=str)
```

```
parser.add_argument("-p", "--password", help="password", type=str)
```

```
args = parser.parse_args()
```

```
host = "imap.gmail.com" username =
```

```
args.username password =
```

```
args.password
```

```
imap = imaplib.IMAP4_SSL(host)
```

```
#create an IMAP4 class with SSL
```

```
imap.login(username, password)
```

```
status, total_email_id = imap.select("INBOX")
```

```
#select folder from where email
```

is being fetched

```

total_email_id = int(messages[0])          # total number of emails indexed by
latest email recieved
current = total_email_id                  #get the latest email id
res, msg = imap.fetch(str(current), "(RFC822)")    #fetch email by ID
for response in msg:
    if isinstance(response, tuple):

        msg = email.message_from_bytes(response[1])    # parse email into a
message object and decode it
        subject = decode_header(msg["Subject"])[0][0]
        if isinstance(subject, bytes):
            subject = subject.decode()
        from_ = msg.get("From")
        print("Subject:", subject)
        print("From:", from_)

    if msg.is_multipart():                  # if the email message is multipart
        for part in msg.walk():
            # extract content type of email
            content_type = part.get_content_type()
            content_disposition = str(part.get("Content-Disposition"))
            try:
                body = part.get_payload(decode=True).decode()    # get the email
body
            except:
                pass
            if content_type == "text/plain" and "attachment" not in content_disposition:
                print(body)
        else:
            content_type = msg.get_content_type()    #get content type of email
            body = msg.get_payload(decode=True).decode()    # get the email body if
            content_type == "text/plain":
                print(body)
imap.close()
imap.logout()

```

Input: Email and Password

Output: Headers of Email

Platform: Ubuntu 20.04

Programming Language Used: Python.

Conclusion: Hence, we obtained the headers of the mails.