/*

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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
```

```python
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.