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Batch: R4

Class: BE-IV

Course: Cyber Security & Digital Forensics (CSDf)

Assignment 1

i. Code -

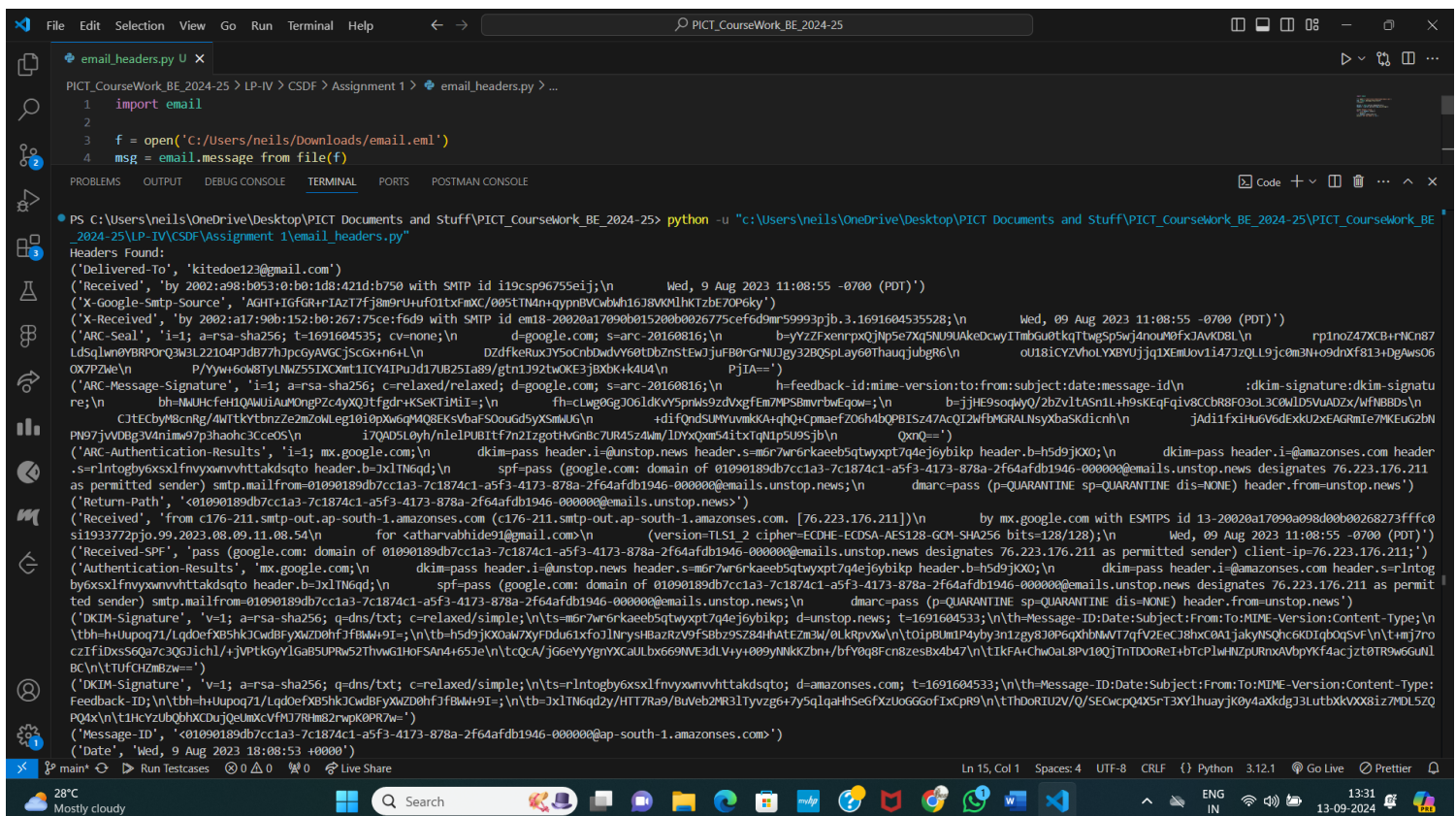
```
import email

f = open('C:/Users/neils/Downloads/email.eml')
msg = email.message_from_file(f)
f.close()

parser = email.parser.HeaderParser()
headers = parser.parsestr(msg.as_string())

print('Headers Found: ')
for i in headers.items():
    print(i)
x = headers.items()[6][1]
print(f'SPF and DKIM is {x}')
```

ii. Output -



```
PS C:\Users\neils\OneDrive\Desktop\PICT Documents and Stuff\PICT_CourseWork_BE_2024-25> python -u "c:\Users\neils\OneDrive\Desktop\PICT Documents and Stuff\PICT_CourseWork_BE_2024-25\PICT_CourseWork_BE_2024-25\LP-IV\CSDf\Assignment 1\email_headers.py"
Headers Found:
('Delivered-To', 'kitedoet23@gmail.com')
('Received', 'by 2002:a98:b053:0:b0:1d8:421d:b750 with SMTP id i19csp96755eij; Wed, 9 Aug 2023 11:08:55 -0700 (PDT)')
('X-Google-Smtp-Source', 'AGHtIGFGRrIAz17fj8mruuuf01txfAXC/005tTM4nqypn8VCwbwh1638VQnlhKTzBE70P6ky')
('X-Received', 'by 2002:a17:90b:152:b0:267:75ce:f6d9 with SMTP id em18-20020a17090b015200b0026775cefd9mr59993pjb.3.1691604535528; Wed, 09 Aug 2023 11:08:55 -0700 (PDT)')
('ARC-Seal', 'i=1; a=rsa-sha256; t=1691604535; cv=none; d=google.com; s=arc-20160816; b=yYzZFxenpxjup5e7XqSMU9UAKedCwyITmbGu0tkqTbwSp5wj4noUW0fxJAWK08L\n rp1noZ47XNCB+rMcn87Ld5qlwvBYBRP0rQ3W3L22104PJdb77hJpcgyAVGCJScgxHn6H\n DZdfkeruxCY5ocnbwdvY6etdbznStEwJgy32BQ5Play60ThauqJubgr6\n OX7PZwe\n P/Yyw+60w81yLWmZ55IXCmt1ICy4IPuJd17UB251A89/gtn1J92tW0KE3j8Xbk+k4U4\n PJIA==')
('ARC-Message-Signature', 'i=1; a=rsa-sha256; c=relaxed/relaxed; d=google.com; s=arc-20160816; h=feedback-id:mime-version:to:from:subject:date:message-id\n dkim-signature:dkim-signature; bh=NUHcfEHIQAMUjAuMONGPZc4yXQJtfgdr+KSeKtMiI; fh=cLWg0GgJ06ldkvY5pknwS9zdVxgfem7MPSBmrvbEqow=\n b=jjHE9sqWq/2bzvltASn1L+h9SkEqf-qiv8CcbR8F03oL3C0wLDSvUADZx/WfNBBDs\n re;\n CjTEcbY4M8cnRg/4WtKtybZze2mZowLeg18i0pXw6qM4QEKsVbafS0ougd5yXsmMUG\n +difQndSUMYvumkKA+qhQ+CpmaefZ06h4QP8ISz47AcQI2WfBMGRALNsyXbaskdien\n jAdi1fciHu6V6dExkU2xEGARmIe7MKEUG2bNPN97jvVDBg34nimw973haohc3Cce05\n i7QAD5L0yh/nle1PUBItf7n2IzgotHvGnBC7UR45z4Wm/LDYxQxm54itXtQn1p5U95jb\n ('ARC-Authentication-Results', 'i=1; mx.google.com; dkim=pass header.i=@unstop.news header.s=mr7wr6rkaeb5qtwyxpt7q4ej6ybikp header.b=h5d9jX0X; dkim=pass header.i=@amazonse.com header.s=rIntogby6xslfnyxwvntttakdsqto header.b=JxLTN6qd; spf=pass (google.com: domain of 01090189db7cc1a3-7c1874c1-a5f3-4173-878a-2f64afdb1946-000000@emails.unstop.news designates 76.223.176.211 as permitted sender) smtp.mailfrom=01090189db7cc1a3-7c1874c1-a5f3-4173-878a-2f64afdb1946-000000@emails.unstop.news; dmarc=pass (p=QUARANTINE sp=QUARANTINE dis=NONE) header.from=unstop.news')
('Return-Path', '<01090189db7cc1a3-7c1874c1-a5f3-4173-878a-2f64afdb1946-000000@emails.unstop.news>')
('Received-SPF', 'from c176-211.smtp-out.ap-south-1.amazonaws.com (c176-211.smtp-out.ap-south-1.amazonaws.com. [76.223.176.211]) by mx.google.com with ESMTPS id 13-20020a17090a098d00b00268273fffc0si1933772pjo.99.2023.08.09.11.08.54\n for <atharvabhide91@gmail.com> (version=TLS1_2 cipher=ECDSA-AES128-GCM-SHA256 bits=128/128); Wed, 09 Aug 2023 11:08:55 -0700 (PDT)')
('Authentication-Results', 'mx.google.com; dkim=pass header.i=@unstop.news header.s=mr7wr6rkaeb5qtwyxpt7q4ej6ybikp header.b=h5d9jX0X; dkim=pass header.i=@amazonse.com header.s=rIntogby6xslfnyxwvntttakdsqto header.b=JxLTN6qd; spf=pass (google.com: domain of 01090189db7cc1a3-7c1874c1-a5f3-4173-878a-2f64afdb1946-000000@emails.unstop.news designates 76.223.176.211 as permitted sender) smtp.mailfrom=01090189db7cc1a3-7c1874c1-a5f3-4173-878a-2f64afdb1946-000000@emails.unstop.news; dmarc=pass (p=QUARANTINE sp=QUARANTINE dis=NONE) header.from=unstop.news')
('DKIM-Signature', 'v=1; a=rsa-sha256; c=dns/txt; c=relaxed/simple; n=ts=mr7wr6rkaeb5qtwyxpt7q4ej6ybikp; d=unstop.news; t=1691604533; n/th=Message-ID:Date:Subject:From:To:MIME-Version:Content-Type; n/thb=H+Uupq71/LqdoefX85hKcWdBFyxwZDdhfJfBWM+9I; n/tb=h5d9jX0Xaw7xyFddu61xf0J1NryshBazRzV9FSbz9S284HATEZm3W/0LkRpvwXn/toipBumIP4yby3n1zgy830P6qXhbmW77qfV2EecJ8hxc0A1jakyNSQhc6KDIqBoqSVF/n/t+hij7roczfiDxsS6Qa7C3Qg3ichl/+jvPt6gyV1Ga8SUPR521HwG1HofSA4653e/n/tCqCA/JG6eYyYgYXcaULBx669WE3dLVy+009yNNKkZbn/bfYq8f8cN8zes8x4b47/n/tkFA+Chwoal8PV18QJ7nTD0oReT+hTcPlw#NZyRnXAVbpYKf4acjzt0TR9w6GuN1BC/n/tUfCHZmBzw=')
('DKIM-Signature', 'v=1; a=rsa-sha256; c=dns/txt; c=relaxed/simple; n=ts=rIntogby6xslfnyxwvntttakdsqto; d=amazonse.com; t=1691604533; n/th=Message-ID:Date:Subject:From:To:MIME-Version:Content-Type:Feedback-ID; n/thb=H+Uupq71/LqdoefX85hKcWdBFyxwZDdhfJfBWM+9I; n/tb=JxLTN6qd2y/HTT7Ra9/BVeb2MR31Tyvzg6+7y5qJlqahSeGfxZuGGGof1xCpR9/n/tTh0RI2UV/Q/SEwcpq4X5rT3XYhuayjK0y4akdgJ3LutbXkvXX8iz7MDL5ZQPQ4X/n/tHcyZubqhxKCDurJqUmxCVfM7JRHm82rwpk0PR7w=')
('Message-ID', '<01090189db7cc1a3-7c1874c1-a5f3-4173-878a-2f64afdb1946-000000@ap-south-1.amazonaws.com>')
('Date', 'Wed, 9 Aug 2023 18:08:53 +0000')
```