```python
1  import imaplib, pyzmail, platform, sys, datetime, locale
2
3  """
4  Ejercicio 4. Desarrollar un script en Python que elimine de una cuenta de correo de
   Gmail los
5  emails no leídos en un intervalo de fechas previamente preestablecido.
6  Nota: paquetes necesarios para el uso de las acciones requeridas (imapclient,pyzmail)
7  """
8
9  """
10 Definition of the main method of the program
11 Name of method: main
12 Date of creation: 27/02/2021
13 Members: Roberto Jiménez y Alberto Pérez
14 Last modification:
15     - 3/03/2021 If a date is wrong, exit from the program
16     - 5/03/2021 Calling deleteMails for delete all incorrect mails
17 Parameters:  None, parameters are read by console
18 """
19 def main():
20
21     if  platform.system() != 'Linux':
22         #Check if is a UNIX machine
23         print("Error, the OS is not a UNIX machine. Getting out...")
24         exit(1)
25     if len(sys.argv) == 1:
26         #Gets the initial date and check if its correct
27         startDate = input("Put the start date: (dd-mm-yyyy): ")
28         startDateAux = checkDate(startDate)
29         if(not(startDateAux)):
30             print("Getting out...")
31             exit()
32
33         #Gets the initial date and check if its correct
34         finalDate = input("Put the final date: (dd-mm-yyyy): ")
35         finalDateAux = checkDate(finalDate)
36         if(not(finalDateAux)):
37             print("Getting out...")
38             exit()
39
40         #Check if the range has sense
41         if(finalDateAux < startDateAux):
42             print("Error, start date is bigger than final date")
43             print("Getting out...")
44             exit()
45
46         #Making login in the mail
47         server = imaplib.IMAP4_SSL('imap.gmail.com')
48         server.login('roberatecaads2@gmail.com', 'administracion2')
49         select_info = server.select("INBOX")
50
51         #Deleting all mails
52         deleteMails(server, startDateAux, finalDateAux)
53
54     else:
55         #Case when parameters are passed to the script
56         print("Error, the parameters are not necessary")
57
58
59 """
```

```python
60 Checks if the date passed got by console is correct
61 Name of method: checkDate
62 Date of creation: 28/02/2021
63 Members: Roberto Jiménez y Alberto Pérez
64 Last modification:
65     - 3/03/2021. Checks the format of the date
66     - 5/03/2021. Checks if the date is correct
67 Parameters:
68     Entry:
69         - date: String of the date provided by the user
70     Out:
71         - datetime, the date in datetime format
72 """
73 def checkDate(date):
74     try:
75         dateAux = str(date).split("-")
76         return datetime.datetime(int(dateAux[2]),int(dateAux[1]),int(dateAux[0]))
77     except ValueError:
78         print("Error, date doesn't exists")
79         return None
80     except IndexError:
81         print("Error, incorrect date format")
82         return None
83
84
85
86 """
87 Delete all mails in a date range
88 Name of method: deleteMails
89 Date of creation: 27/02/2021
90 Members: Roberto Jiménez y Alberto Pérez
91 Last modification:
92     - 27/02/2021 Delete all mails without date range
93     - 28/02/2021 Using the since sentence for delete the mails in the date range
94 Parameters:
95     Entry:
96         - server: Connection with the mail provider
97         - startDate: Initial date provided by the user
98         - finalDate: Final date provided by the user
99     Out:
100 """
101 def deleteMails(server,startDate,finalDate):
102     query = ("UNSEEN SINCE " + startDate.strftime("%d-%b-%Y") + " BEFORE "
103             + finalDate.strftime("%d-%b-%Y"))
104     estado, messages = server.search(None,query)
105     messages = messages[0].split()
106
107     for mail in messages:
108         server.store(mail, '+FLAGS', '\\Deleted')
109     print(str(len(messages)) + " mail deleted")
110     server.expunge()
111
112
113 if __name__ == "__main__":
114     """
115     In that case, we check that the program starts in the right function, in our
116     case, main()
117     """
118     main()
119
```