

Name: Patel Nayankumar Tulsidas

Enrollment No. : 151060751020

Seat No. : M200876

Q-1.[practical 18] open a html file of GTU website and print the all the links available on this file.

Source Code:

```
#!/usr/bin/python3
```

```
import sys
import urllib.request
import re
```

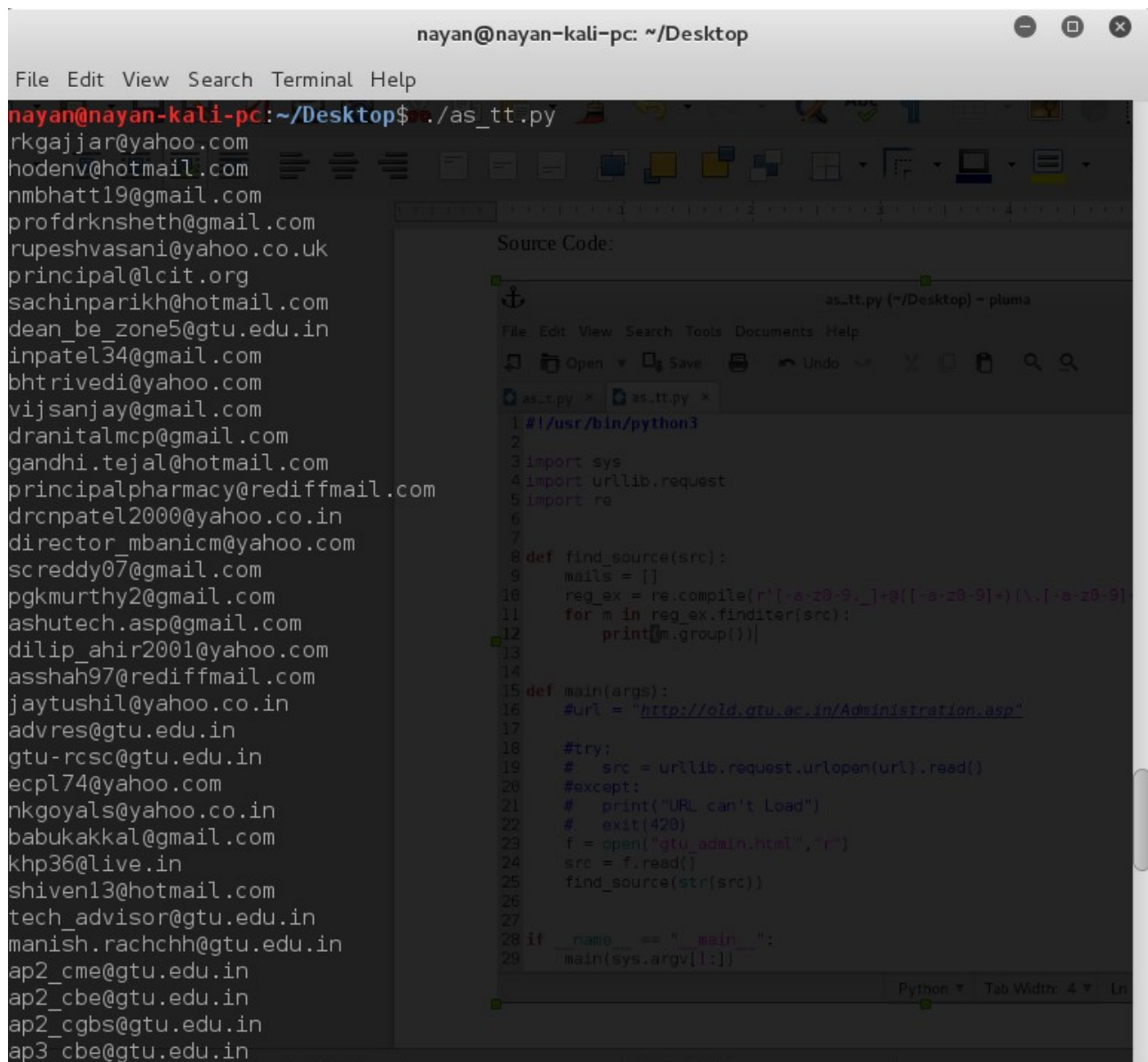
```
def find_source(src):
    mails = []
    reg_ex = re.compile(r'[-a-z0-9._]+@([-a-z0-9]+)(\.[-a-z0-9]+)'+
+',re.IGNORECASE)
    for m in reg_ex.finditer(src):
        print(m.group())
```

```
def main(args):
    #url = "http://old.gtu.ac.in/Administration.asp"

    #try:
    #    src = urllib.request.urlopen(url).read()
    #except:
    #    print("URL can't Load")
    #    exit(420)
    f = open("gtu_admin.html","r")
    src = f.read()
    find_source(str(src))
```

```
if __name__ == "__main__":
    main(sys.argv[1:])
```

Output :



The screenshot shows a Kali Linux desktop environment. On the left, a terminal window titled 'nayan@nayan-kali-pc: ~/Desktop' displays a list of email addresses. On the right, a code editor window titled 'as_tt.py (~/Desktop) - pluma' shows the source code of a Python script.

Terminal Output:

```
nayan@nayan-kali-pc: ~/Desktop$ cat as_tt.py
rk_gajjar@yahoo.com
hodenv@hotmail.com
nmbhatt19@gmail.com
profdrknsbeth@gmail.com
rupeshvasani@yahoo.co.uk
principal@lcit.org
sachinparikh@hotmail.com
dean_be_zone5@gtu.edu.in
inpatel34@gmail.com
bhtrivedi@yahoo.com
vijsanjay@gmail.com
dranitalmcp@gmail.com
gandhi.tejal@hotmail.com
principalpharmacy@rediffmail.com
drcnpatel2000@yahoo.co.in
director_mbanicm@yahoo.com
screddy07@gmail.com
pgkmurthy2@gmail.com
ashutech.asp@gmail.com
dilip_ahir2001@yahoo.com
asshah97@rediffmail.com
jaytushil@yahoo.co.in
advres@gtu.edu.in
gtu-rcsc@gtu.edu.in
ecpl74@yahoo.com
nkgoyals@yahoo.co.in
babukakkal@gmail.com
khp36@live.in
shiven13@hotmail.com
tech_advisor@gtu.edu.in
manish.rachchh@gtu.edu.in
ap2_cme@gtu.edu.in
ap2_cbe@gtu.edu.in
ap2_cgbs@gtu.edu.in
ap3_cbe@gtu.edu.in
```

Source Code:

```
#!/usr/bin/python3
import sys
import urllib.request
import re

def find_source(src):
    mails = []
    reg_ex = re.compile(r'[-a-z0-9_]+@([-a-z0-9]+\.)+[-a-z0-9]+')
    for m in reg_ex.finditer(src):
        print(m.group())

def main(args):
    url = "http://old.gtu.ac.in/Administration.asp"
    try:
        src = urllib.request.urlopen(url).read()
    except:
        print("URL can't Load")
        exit(420)
    f = open("gtu_admin.html", "r")
    src = f.read()
    find_source(str(src))

if __name__ == "__main__":
    main(sys.argv[1:])
```

Q-2.[practical 24] Write a function named list_of_primes that accepts a positive integer n and returns a sorted list (ascending order) of all the prime numbers between 2 and n (including 2 but not including n)

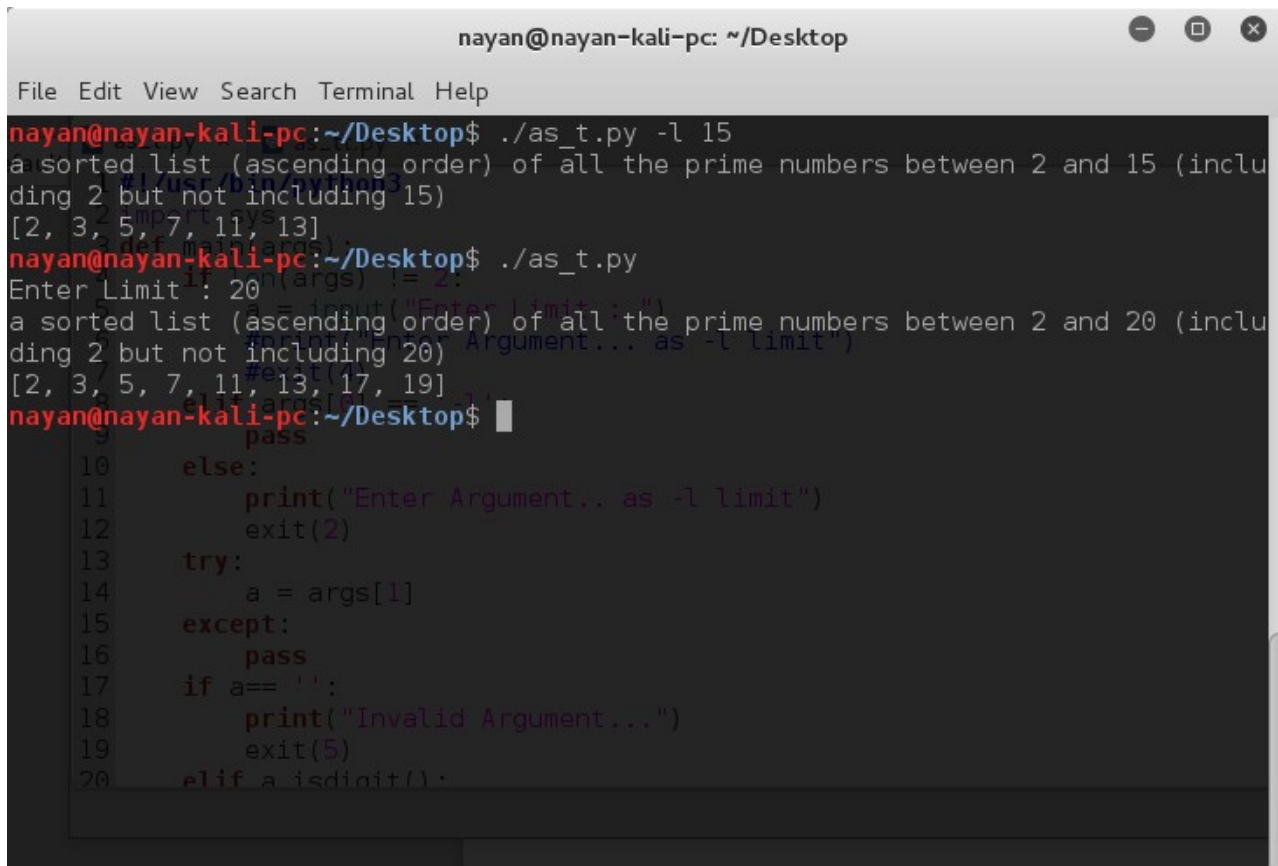
Source Code:

```
#!/usr/bin/python3
import sys
def main(args):
    if len(args) != 2:
        a = input("Enter Limit : ")
        #print("Enter Argument... as -l limit")
        #exit(4)
    elif args[0] == '-l':
        pass
    else:
        print("Enter Argument.. as -l limit")
        exit(2)
    try:
        a = args[1]
    except:
        pass
    if a == "":
        print("Invalid Argument...")
        exit(5)
    elif a.isdigit():
        a = int(a)
    elif a[0] == '-' and a[1:].isdigit():
        print("Negative Number Not Allowed")
    else:
        print("Invalid Argument")
        exit(4)
    print("a sorted list (ascending order) of all the prime numbers between 2 and "+str(a)+" (including 2 but not including "+str(a)+") ")
    primes = []
    for n in range(2,a):
        prime = True
        for p in range(2,n):
            if n%p == 0:
                prime = False
```

```
    if prime:
        primes.append(n)
print(primes)
```

```
if __name__ == "__main__":
    main(sys.argv[1:])
```

Output:



```
nayan@nayan-kali-pc: ~/Desktop
File Edit View Search Terminal Help
nayan@nayan-kali-pc:~/Desktop$ ./as_t.py -l 15
a sorted list (ascending order) of all the prime numbers between 2 and 15 (including 2 but not including 15)
[2, 3, 5, 7, 11, 13]
nayan@nayan-kali-pc:~/Desktop$ ./as_t.py
Enter Limit : 20
a sorted list (ascending order) of all the prime numbers between 2 and 20 (including 2 but not including 20)
[2, 3, 5, 7, 11, 13, 17, 19]
nayan@nayan-kali-pc:~/Desktop$ █

9         pass
10     else:
11         print("Enter Argument.. as -l limit")
12         exit(2)
13     try:
14         a = args[1]
15     except:
16         pass
17     if a== '':
18         print("Invalid Argument...")
19         exit(5)
20     elif a.isdigit():
```