

**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
```

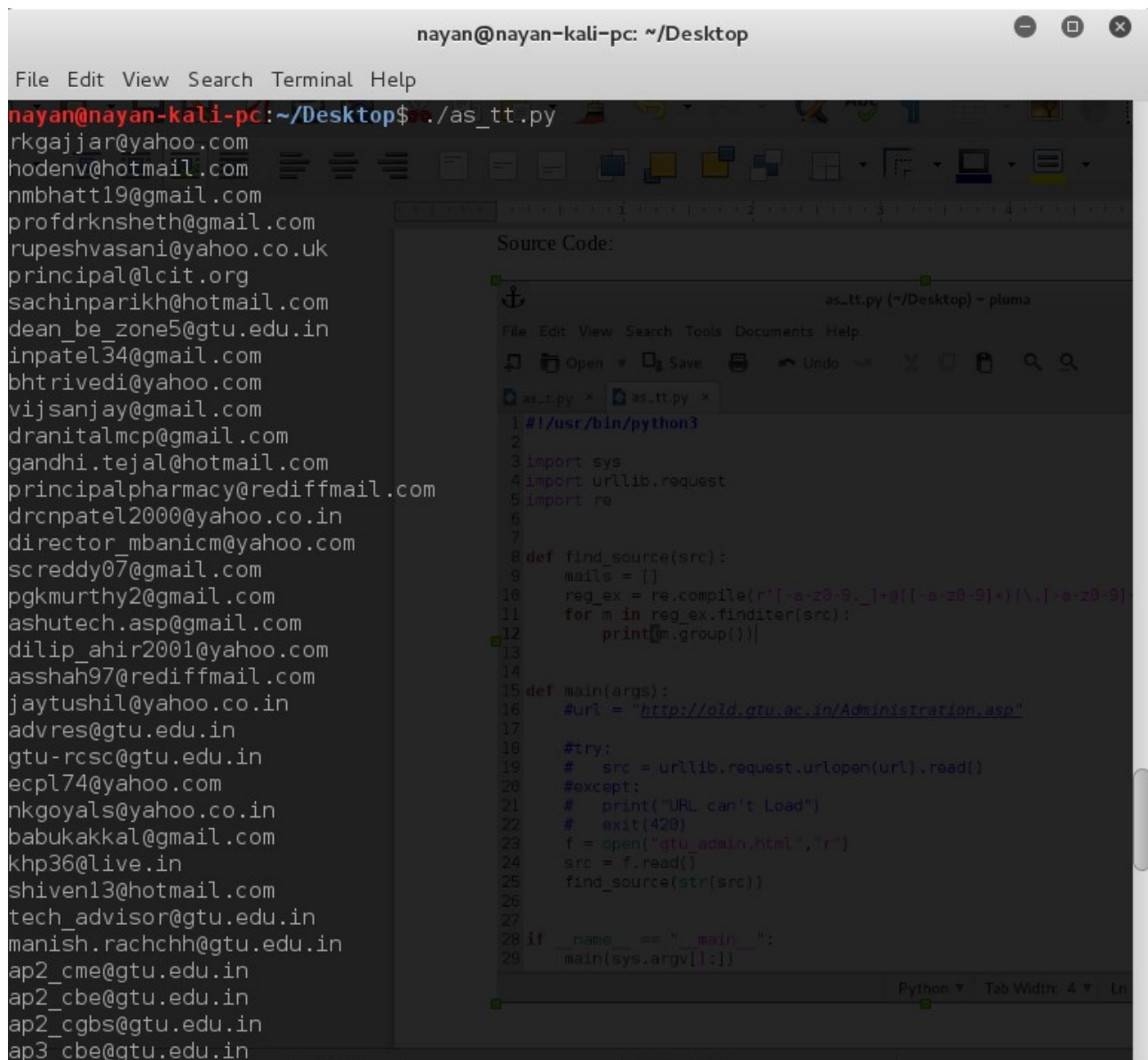
```
def find_source(src):
    mails = []
    reg_ex = re.compile(r'[-a-z0-9._]+@([-a-z0-9]+)(\.[-a-z0-9]+)'+
+',re.IGNORECASE)
    for m in reg_ex.finditer(src):
        print(m.group())
```

```
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 the output of a script. The output is a list of email addresses. On the right, a code editor window titled 'as\_tt.py (~/Desktop) - pluma' shows the source code of the script. The code is a Python script that uses a regular expression to find email addresses in a file named 'gtu\_admin.html'.

```
nayan@nayan-kali-pc: ~/Desktop$ ./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:
as_tt.py (~/Desktop) - pluma
File Edit View Search Tools Documents Help
Open Save Undo Redo Find
as_tt.py x as_tt.py x
1 #!/usr/bin/python3
2
3 import sys
4 import urllib.request
5 import re
6
7 def find_source(src):
8     mails = []
9     reg_ex = re.compile(r'[-a-z0-9_]+@([-a-z0-9]+\.)+[-a-z0-9]+'
10     for m in reg_ex.finditer(src):
11         print(m.group())
12
13
14 def main(args):
15     #url = "http://old.gtu.ac.in/Administration.asp"
16
17     #try:
18     #    src = urllib.request.urlopen(url).read()
19     #except:
20     #    print("URL can't Load")
21     #    exit(420)
22     f = open("gtu_admin.html", "r")
23     src = f.read()
24     find_source(str(src))
25
26
27
28 if __name__ == "__main__":
29     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 list_of_primes(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)

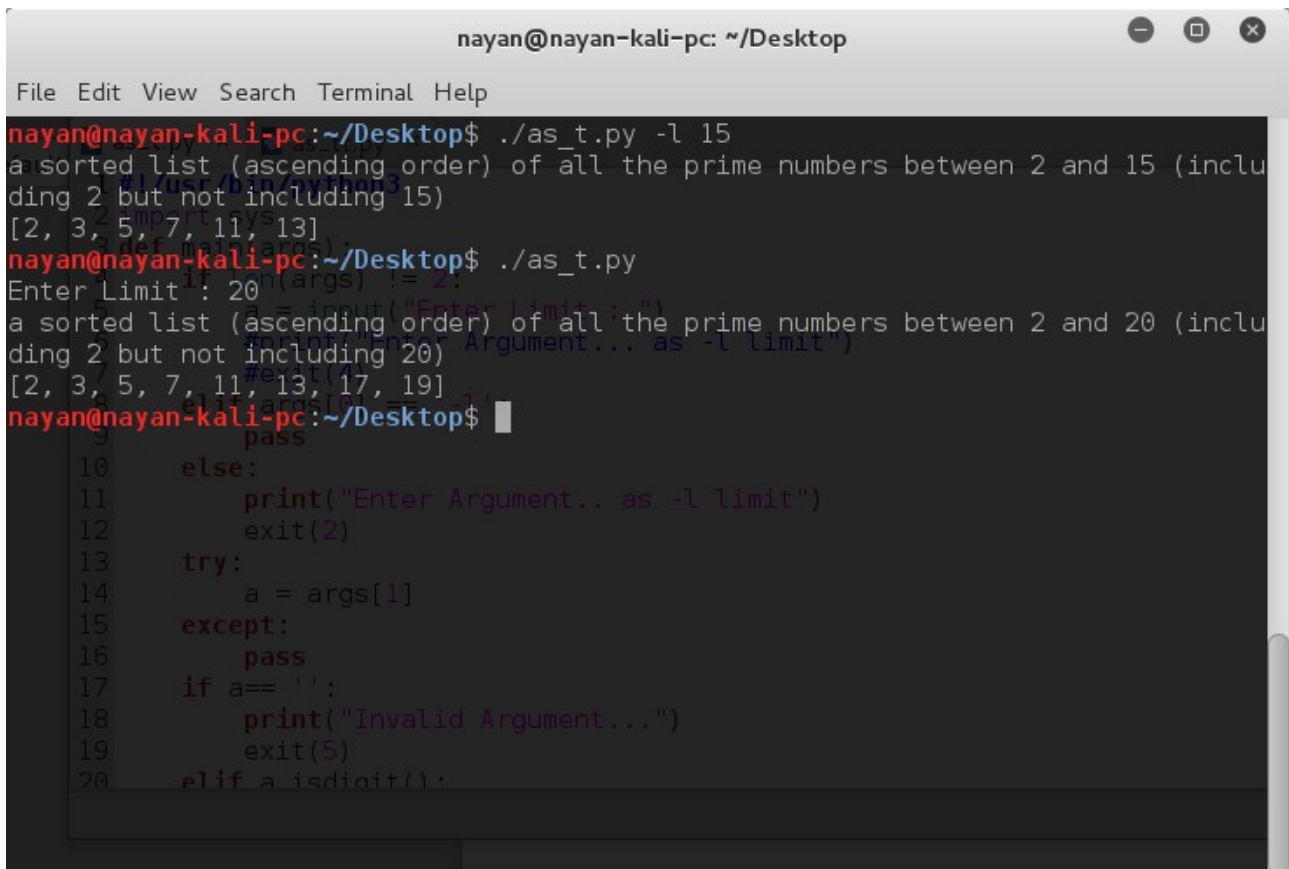
    primes = []
    for n in range(2,a):
        prime = True
        for p in range(2,n):
            if n%p == 0:
                prime = False
        if prime:
```

```

        primes.append(n)
    print(primes)
def main():
    print("a sorted list (ascending order) of all the prime numbers between 2 and
n (including 2 but not including n) ")
    print(list_of_primes(sys.argv[1:]))
if __name__ == "__main__":
    main()

```

### Output:



The screenshot shows a terminal window titled "nayan@nayan-kali-pc: ~/Desktop". The terminal displays the execution of a Python script named "as\_t.py".

First, the command `./as_t.py -l 15` is executed. The output is:

```

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]

```

Next, the command `./as_t.py` is executed. The prompt "Enter Limit : 20" appears, followed by the output:

```

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]

```

The terminal also shows the source code of the script "as\_t.py" with line numbers 10 through 20:

```

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():

```