PYTHON PRACTICAL'S

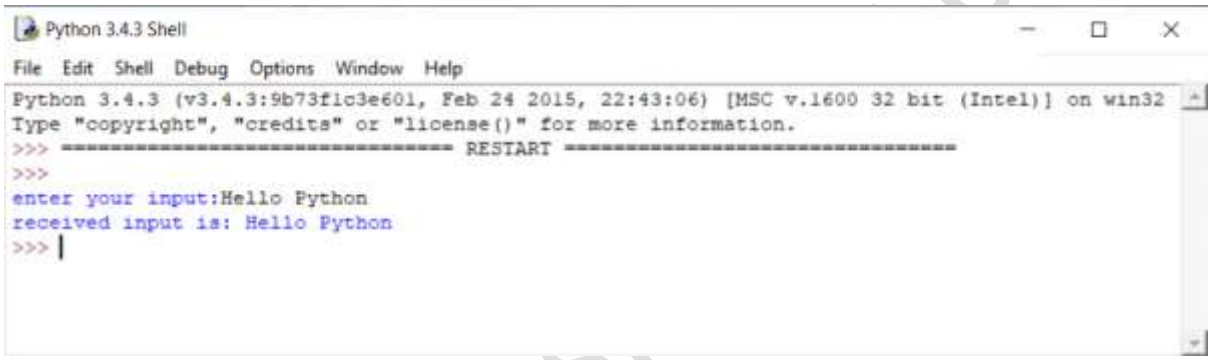
BY METHOD ONE

1.Write a program in python in GUI to print raw_input function.

Program:

```
str=input("enter your input");
print("received input is:",str)
```

Output:

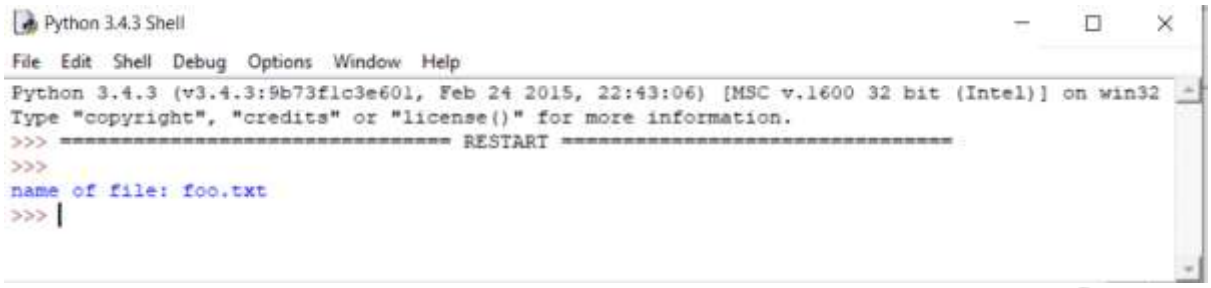


2.Write a program in python in GUI to show opening and closing file.

Program:

```
fo=open("foo.txt","wb")
print("name of file:",fo.name)
print("closed or not:",fo.closed)
print("opening mode:",fo.mode)
print("softspace flag:",fo.softspace)
```

Output:

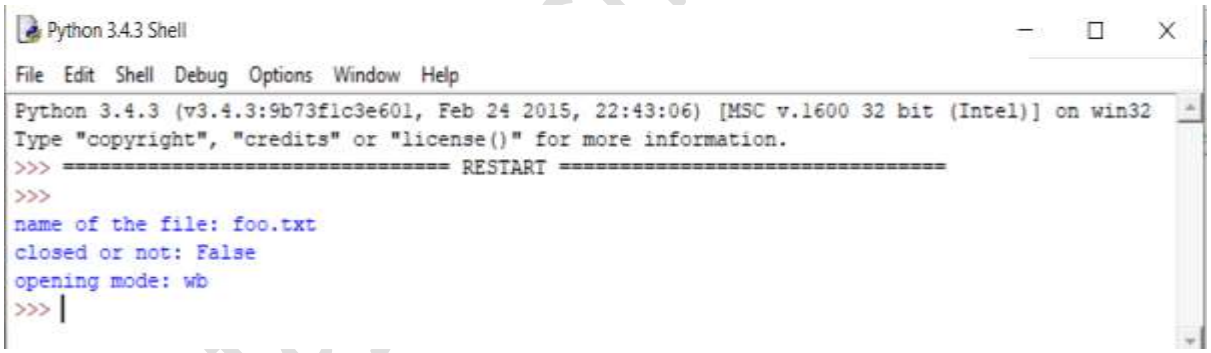


3.Write a program in GUI to Show close function.

Program:

```
fo=open("foo.txt","wb")
print("name of the file",fo.name)
fo.close
```

Output:

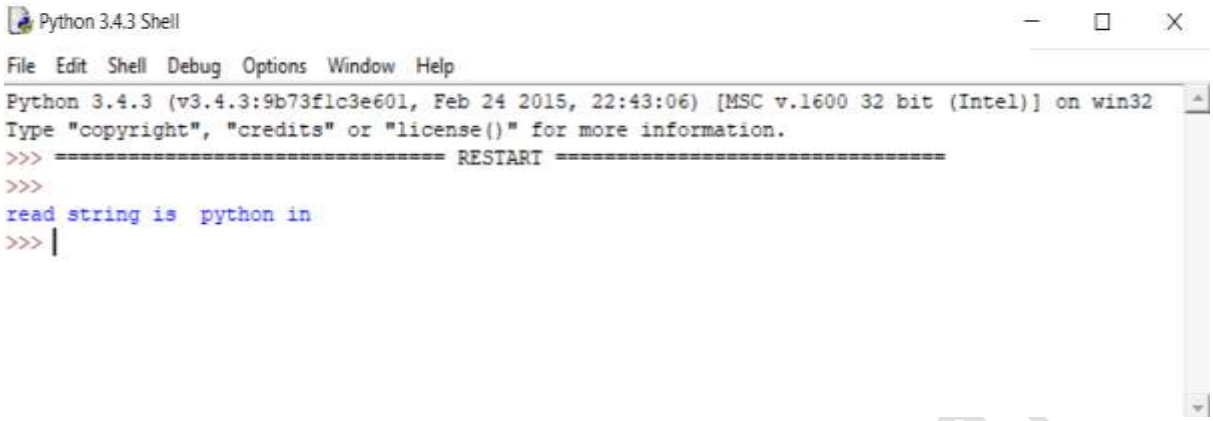


4.Write a program to show in GUI to show Write function.

Program:

```
fo=open("foo.txt","wb")
fo.write("python in great lang\n")
fo.close
```

Ouput:

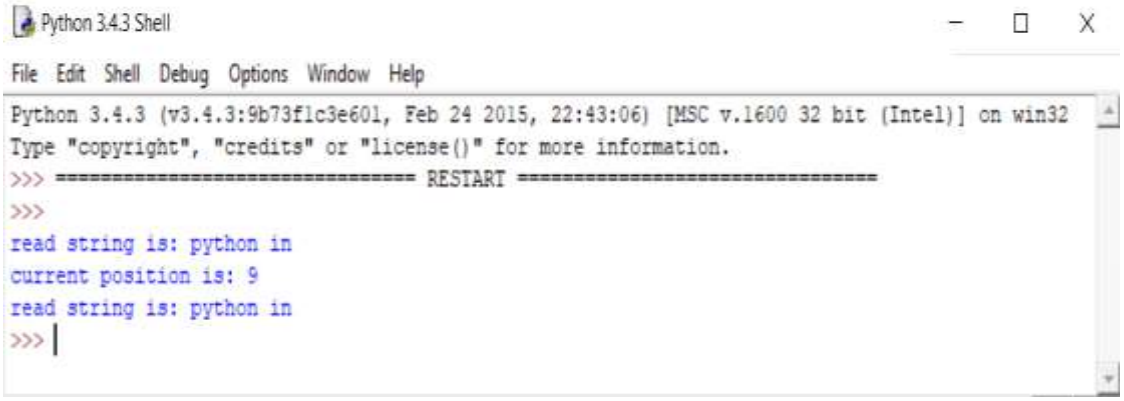


5.Write a program in GUI to show the current position and read function.

Program:

```
fo=open("foo.txt","r+")
str=fo.read(10)
print("read string is:",str)
position=fo.tell();
print("current position is:",+position)
position=fo.seek(0,0);
str=fo.read(10);
print("read string is:",str)
fo.close()
```

Output:



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6.Write a program in python to demonstrate How to rename a file.

Program:

```
import os
os.rename("test1.txt,"test2.txt")
```

7. Write a program in python to demonstrate How to remove a file.

Program:

```
import os
os.remove("test2.txt")
```

8. Write a program in python to demonstrate How to make a Directory.

Program:

```
import os
os.mkdir("test")
```

9. Write a program in python to demonstrate How to change a Directory.

Program**:**

```
Import os
os.chdir("/home/newdir")
```

10. Write a program in python to demonstrate location of the current a Directory.

Program:

```
import os
os.getcwd()
```

11. Write a program in python to demonstrate How to remove a Directory.

Program:

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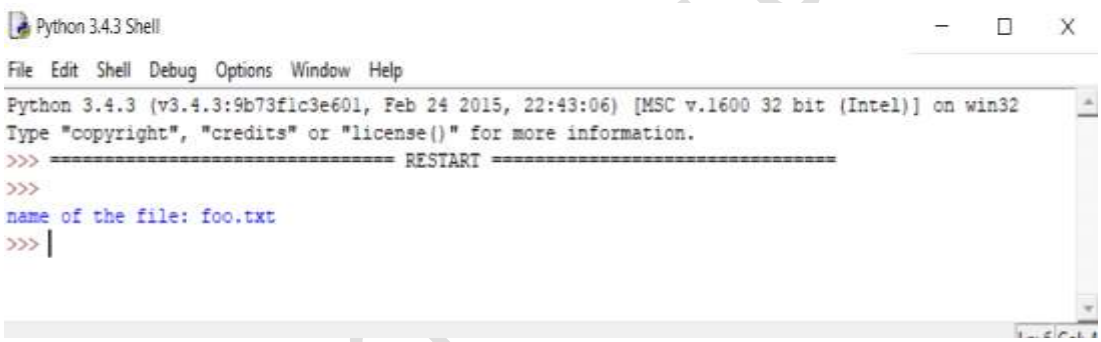
```
import os
os.rmdir("/tmp/test")
```

12. Write a program in python to demonstrate How to open or close file.

Program:

```
fo=open("foo.txt","r+")
print("name of the file:",fo.name)
fo.close()
```

Output:

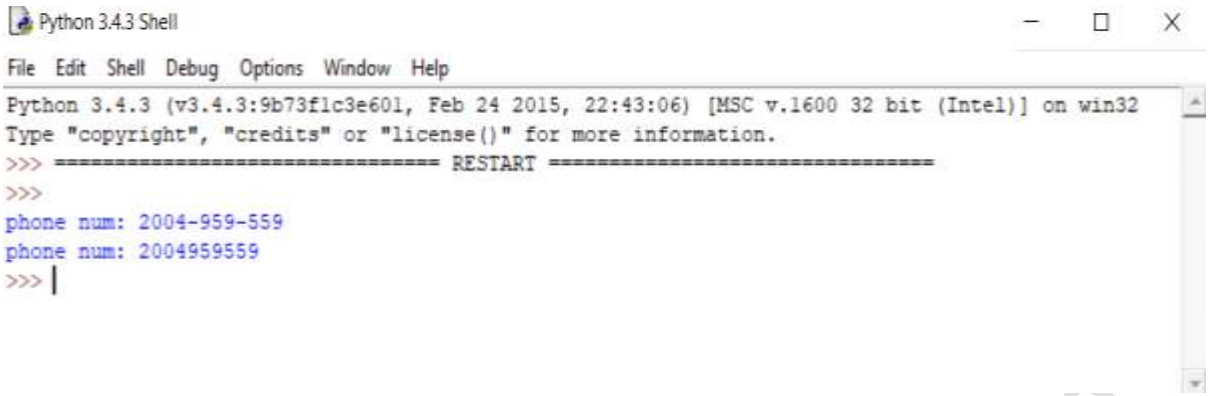


13.Write a program in python to demonstrate search & replace expression.

Program:

```
import re
phone="2004-959-559# This is phone number"
num=re.sub(r'#.*$',"",phone)
print('phone num:',(num))
num=re.sub(r'\D',"",phone)
print('phone num:',(num))
```

Output:

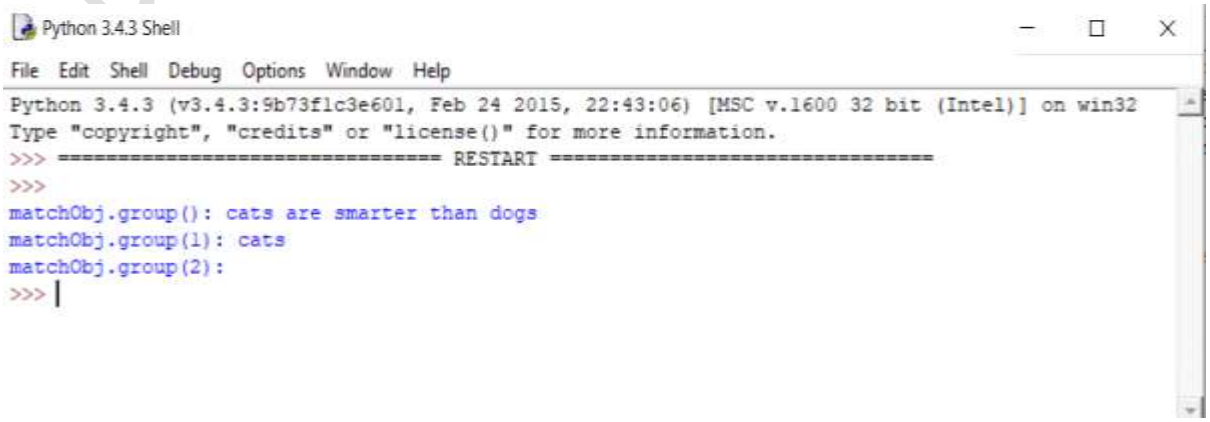


14.Write a program in python to demonstrate Match Function.

Program:

```
import re
line=("cats are smarter than dogs")
matchObj=re.match(r'(.*)are(.*?).*',line,re.M|re.I)
I f matchObj:
    print('match Obj.group():',(matchObj.group()))
    print('matchObj.group(1):',(matchObj.group(1)))
    print('matchObj.group(2):',(matchObj.group(2)))
else:
    print('no match!!')
```

Output:



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15.Write a program in python to demonstrate Search Function.

Program:

```
import re
line=("cats are smarter than dogs")
searchObj=re.match(r'(.*)are(.*?).*',line,re.M|re.I)
if searchObj:
    print('searchObj.group():',(searchObj.group()))
    print('searchObj.group(1):',(searchObj.group(1)))
    print('searchObj.group(2):',(searchObj.group(2)))
else:
    print('nothing found!!')
```

Output:

16.Write a program to demonstrate matching vs. searching expression.

Program:

```
import re
line=("cats are smarter than dogs")
matchObj=re.match(r'(.*)are(.*?).*',line,re.M|re.I)
if matchObj:
```

```
        print('match-->matchObj.group():',(matchObj.group()))
    else:
        print('no match!!')
    searchObj=re.search(r'dogs',line,re.M|re.I)
    if searchObj:
        print('search>searchObj.group(1):',(searchObj.group())
    else:
        print("nothing found!!")
```

SECOND WAY

1.Programs to read and write files.

(a). Program to read line the file.

Program:

```
f=open("new.txt","r")
text=t.read()
print("\n output",text)
f.close()
```

Output:

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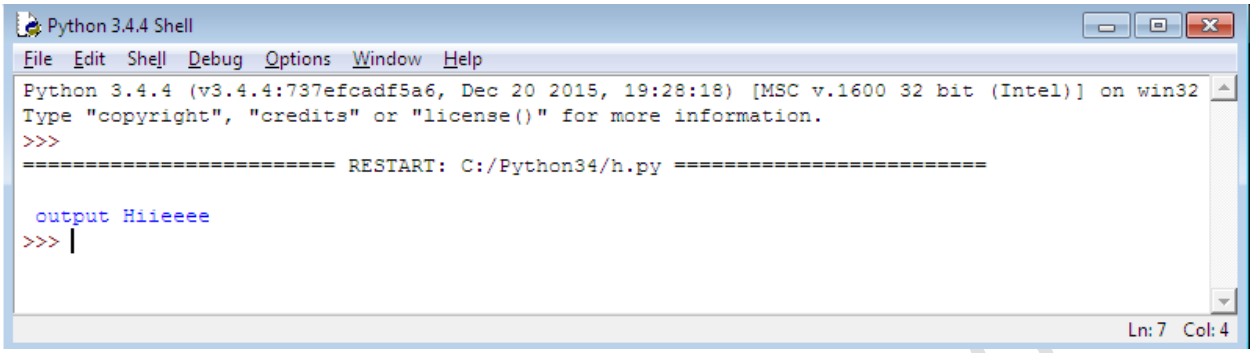

(b). Program to write the file.

Program:

```
f=open("output.txt","w")
f.write("there was once a merchant who employee")
f.close()
f=open("output.txt","r")
text=f.read()
print("\noutput\n",text)
f.close()
```

Output:

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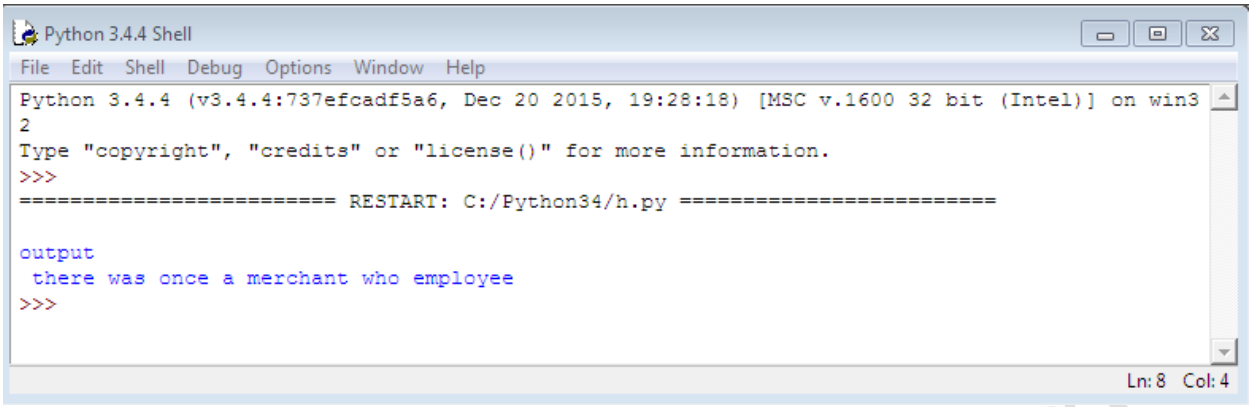

2.Programs with Iterator and iterable.

Program:

```
def fibonacci(n):
    a,b=0,1
    while a<n:
        print(a,end='')
        a,b=b,a+b
        print()
fibonacci(25)
```

Output:

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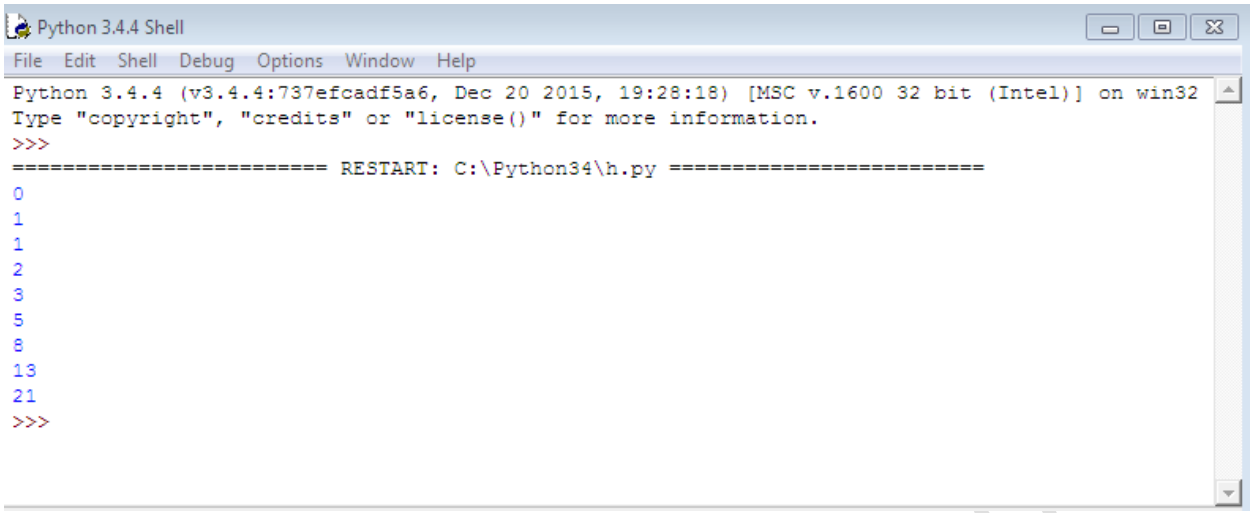
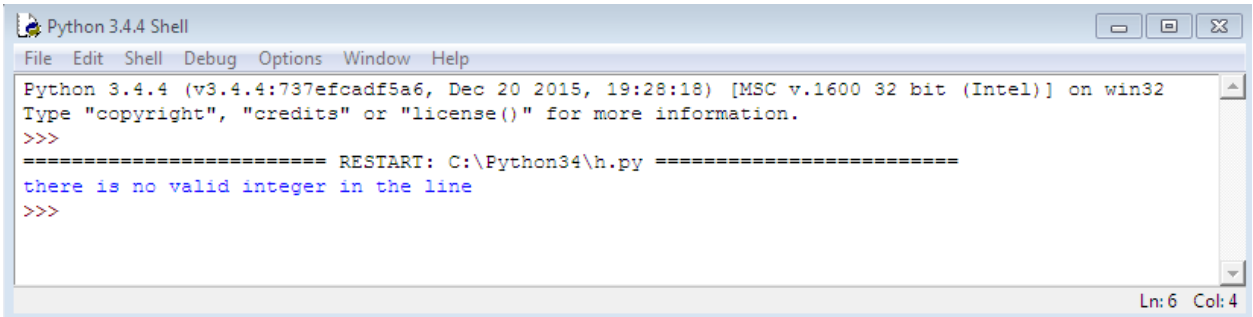


3.Program to Demonstrate exception handling.

Program:

```
try:
        f=open("myfile.txt")
       d=f.readline()
        i=int(d.strip())
except IOError as e:
        reene,strerr=e.args
        print('I/O error({0}):{1}'.format(errno,strerr))
except ValueError:
        print("there is no valid integer in the line")
except:
         print("unexcepted error:")
          raise
```

Output:



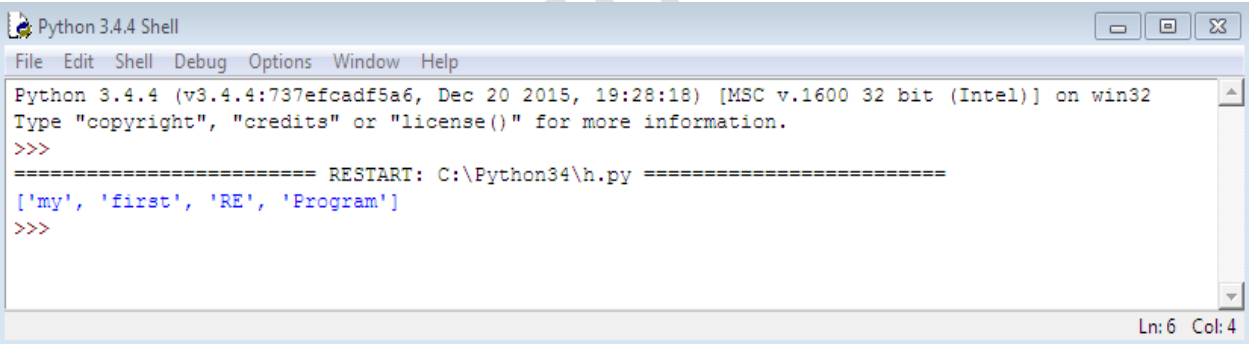
4.Programs to demonstrate the use of regular expression.

(a).

Program:

```
import re
print(re.split(r'\s*','my first RE Program'))
```

Output:

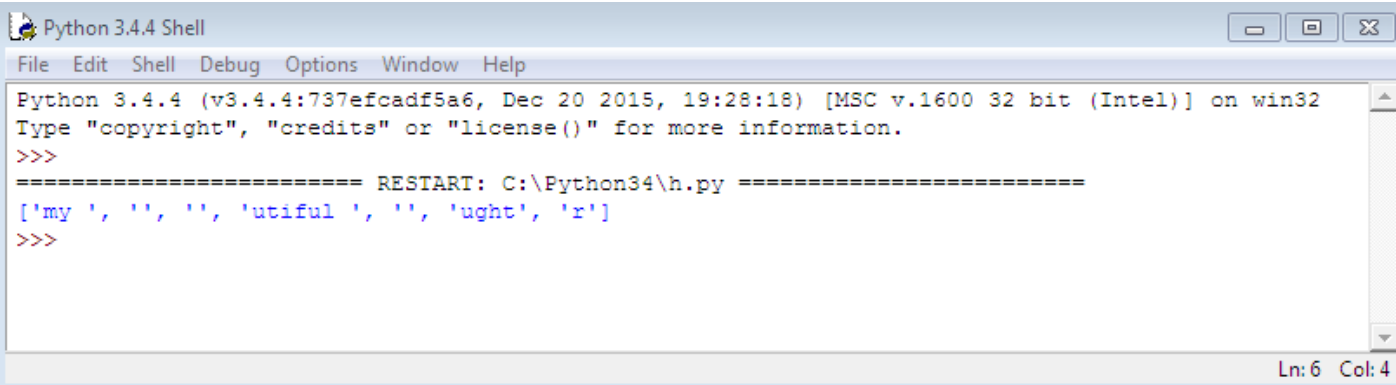


(b).

Program:

```
import re
print(re.split(r'[a-e]','my beautiful daughter'))
```

Output:

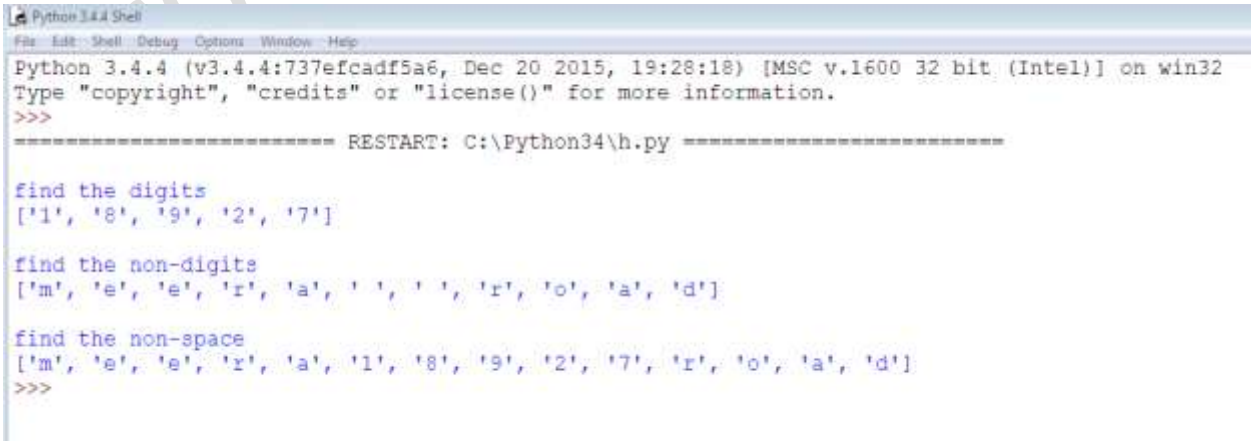


(c).

Program:

```
import re
print('\nfind the digits')
print(re.findall(r'\d','meera 18927 road'))
print('\nfind the non-digits')
print(re.findall(r'\D','meera 18927 road'))
print('\nfind the non-space')
print(re.findall(r'\S','meera 18927 road'))
```

Output:



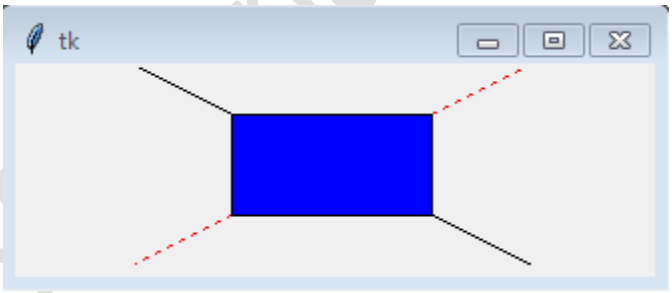
5.Program to show draw shapes and GUI control.

(a). Create line with rectangle.

Program():

```
from tkinter import*
master=Tk()
w= Canvas(master,width=200,height=100)
w.pack()
w.create_line(0,0,200,100)
w.create_line(0,100,200,0,fill="red",dash=(4,4))
w.create_rectangle(50,25,150,75,fill="blue")
mainloop()
```

Output:



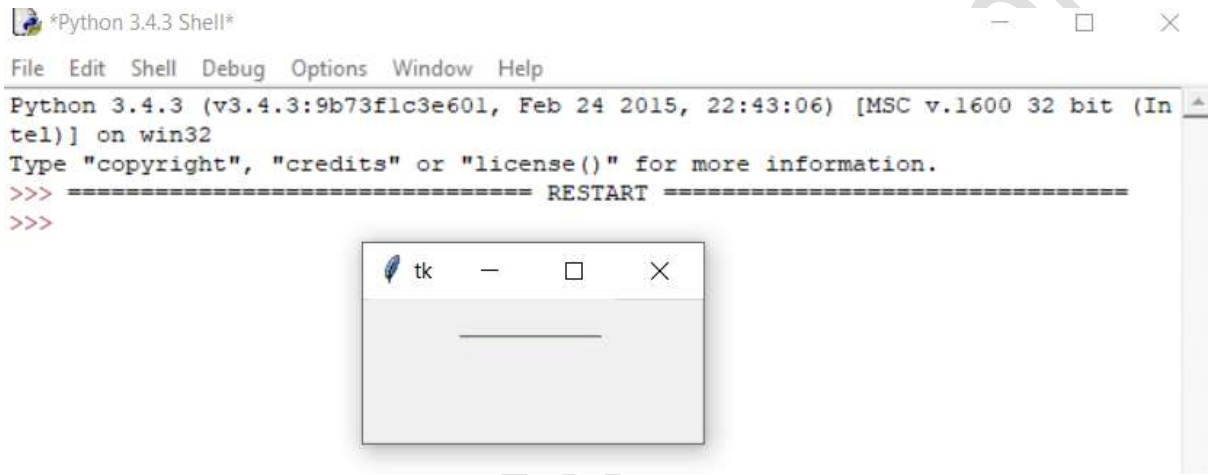
(b). Create a line with canvas width=80 and height=40.

Program:

```
from tkinter import*
master=Tk()
canvas_width=80
canvas_height=40
```

```
w=Canvas(master,width=canvas_width,height=canvas_heigh
t)

w.pack()

y=int(canvas_height/2)

w.create_line(0,y,canvas_width,y,fill="#476042")

mainloop()
```

Output:

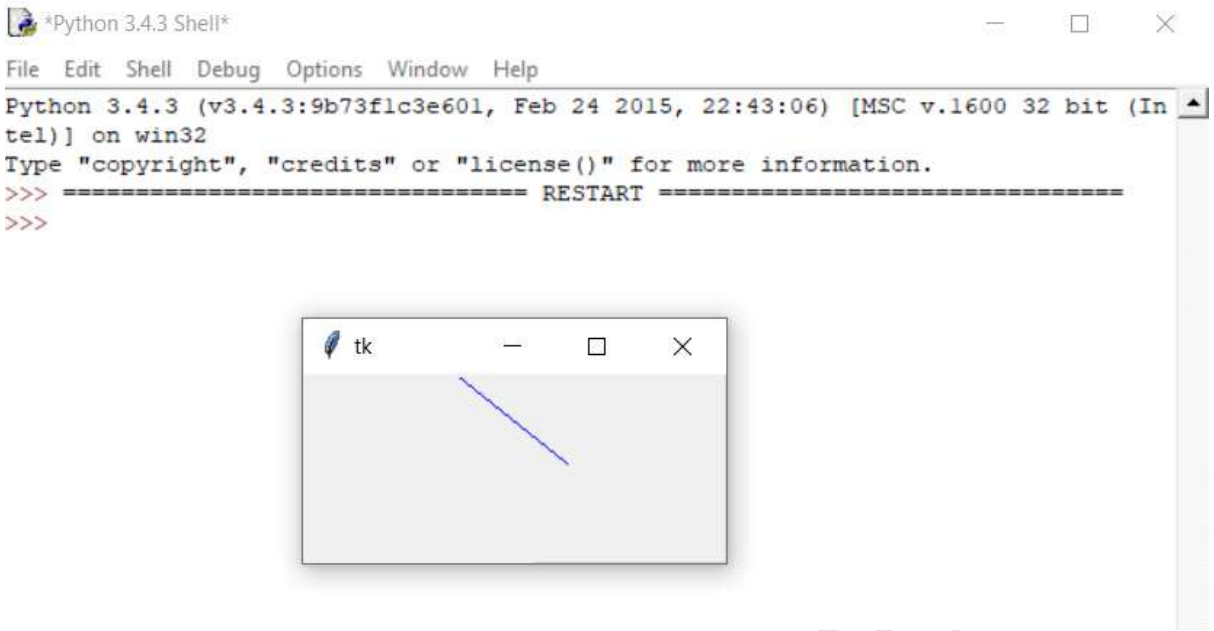


(C). **Program to Create two lines.**

Program:

```
from tkinter import*

root=Tk()

L=Canvas(root,width=60,height=80)

L.pack()

L.create_line(0,0,100,80,file="blue")

L.create_line(0,0,80,100,file="blue")

mainloop()
```

Output:

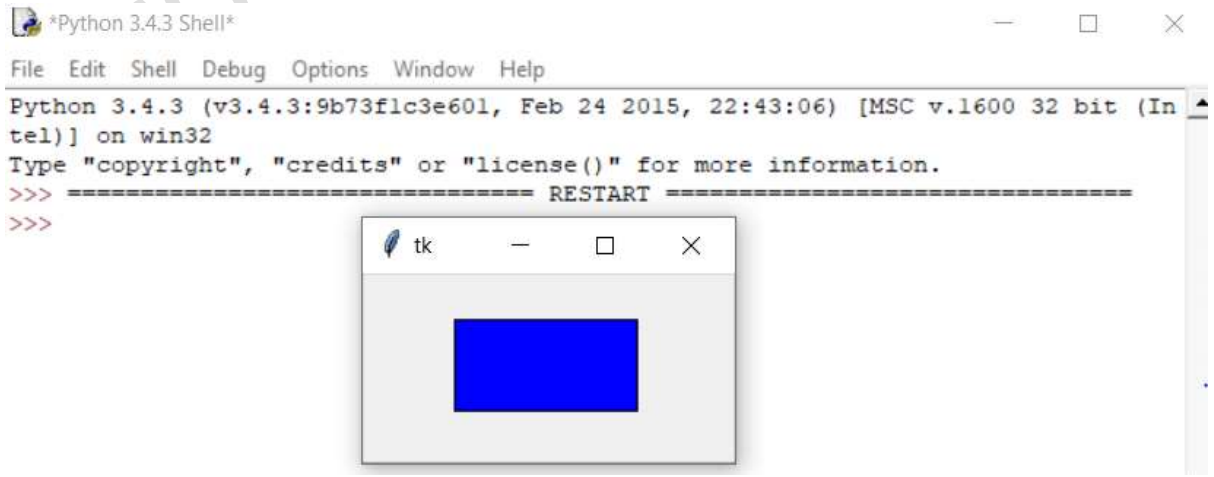


(d).Program to create a rectangle.

Program:

```
from tkinter import*
master=Tk()
w=Canvas(master,width=200,height=100)
w.pack()
w.create_rectangle(50,25,150,75,fill="blue")
mainloop()
```

Output:

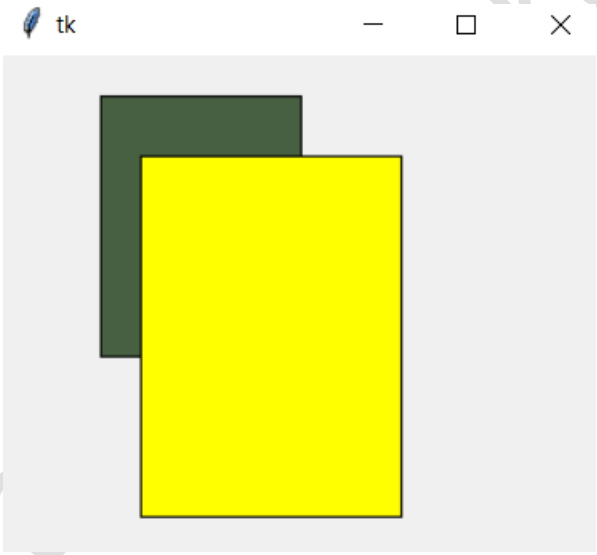


(e).Program to draw 2 rectangles of color yellow and green.

Program:

```
from tkinter import*
window=Tk()
s=Canvas(window,width=300,height=300)
s.pack()
s.create_rectangle(50,20,150,150,fill="#476042")
s.create_rectangle(70,50,200,230,fill="yellow")
mainloop()
```

Output:



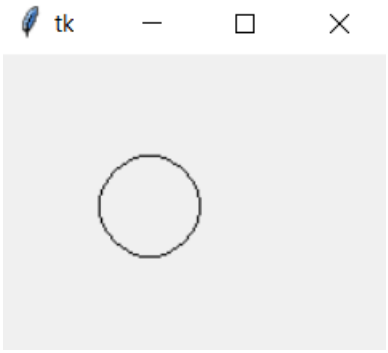
(f).Program to draw Oval.

Program:

```
from tkinter import*
canvas_width=190
canvas_height=150
master=Tk()
w=Canvas(master,width=canvas_width,height=canvas_height)
w.pack()
```

```
w.create_oval(50,50,100,100)

mainloop()
```

Output:



(g).Program to draw Oval of color sky blue.

Program:

```
from tkinter import*

root=Tk()

w=Canvas(root,width=350,height=350)

w.pack()

w.create_oval(50,100,310,280,fill="sky blue")

mainloop()
```

Output:

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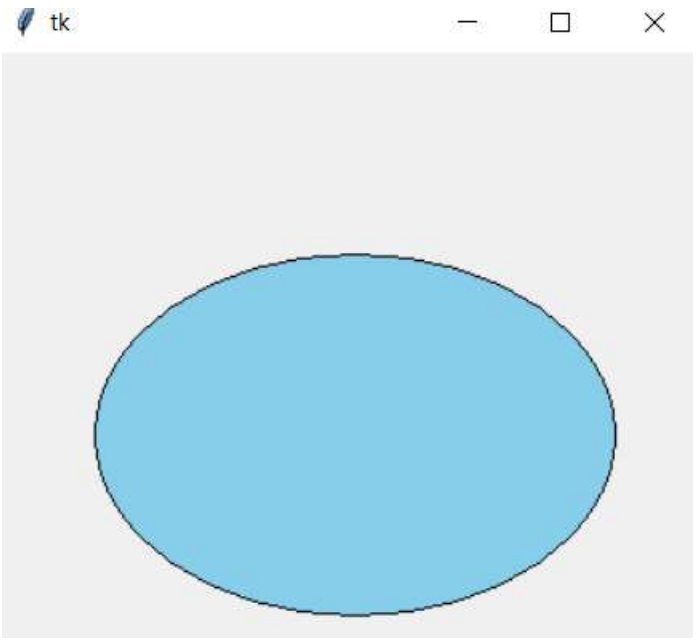

(h).Program to draw 2 oval of color sky blue and dark blue.

Program:

```
from tkinter import*
root=Tk()
root=Tk()
o=Canvas(root,bg="skyblue",width=500,height=500)
o.pack()
o.create_oval(160,200,240,260,fill="dark blue")
o.create_oval(50,90,310,380)
root.mainloop()
```

Output:

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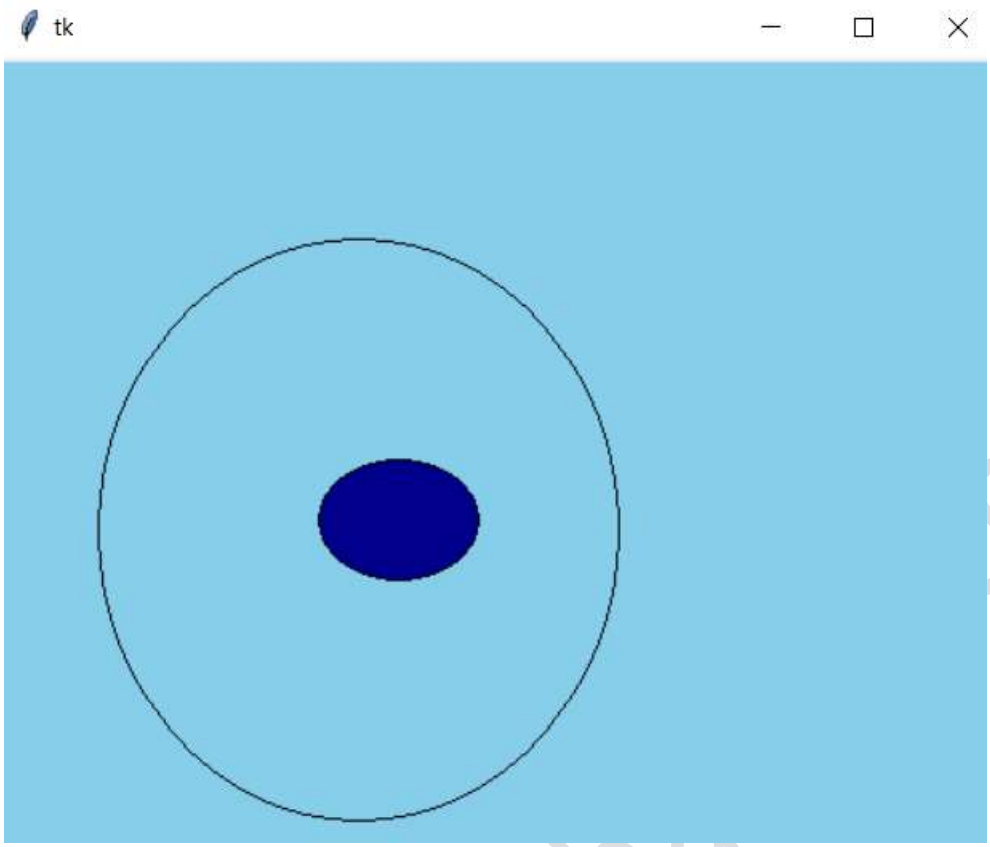
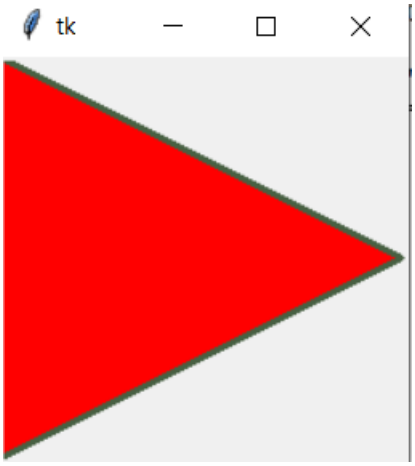


(i).create_polygon(x0,y0,x1,y1,x2,y2,…)

Program:

```
from tkinter import*
canvas_width=200
canvas_height=200
python_green="#476042"
master=Tk()
w=Canvas(master,width=canvas_width,height=canvas_height)
w.pack()
points=[0,0,canvas_width,canvas_height/2,0,canvas_height]
w.create_polygon(points,outline=python_green,fill='red',width=3)
mainloop()
```

Output:



6.Program to send email & read contents of URL.

Program:

```
import urllib.request

import re

fhand = urllib.request.urlopen('https://media.geeksforgeeks.org/wp-content/uploads/e-mail-1.txt')


for line in fhand:

    s = line.decode().strip()

    reg = re.findall(r"[A-Za-z0-9._%+-]+"

                     r"@[A-Za-z0-9.-]+"

                     r"\.[A-Za-z]{2,4}", s)

print(reg)
```

Output:

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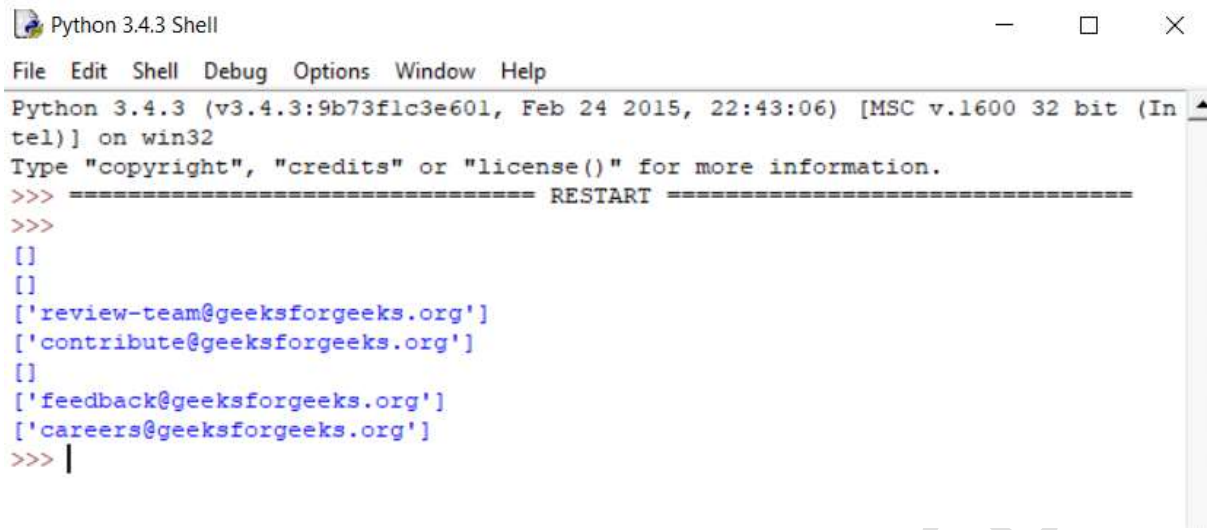

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