DISTRIBUTED SYSTEMS LAB

LAB –1

PYTHON BASIC PRACTICE-1

```
counter = 100 # An integer assignment

miles = 1000.0 # A floating point

name = "John" # A string

print (counter)

print (miles)

print (name)
```

```
a = 5 # integer assignment

b= 4.56 #floating point assignment #mathematical operations with scalar variables print (5*a), would give the result 25

print (a/2) #would give the result 2.5

print(a**2) #is the power (squaring operation) would give the result 25
```

```
str = 'Hello World!'

print (str) # Prints complete string

print (str[0]) # Prints first character of the string

print (str[2:5]) # Prints characters starting from 3rd to 5th print (str[2:]) # Prints string starting from 3rd character
print (str * 2) # Prints string two times

print (str + "TEST") # Prints concatenated string
```

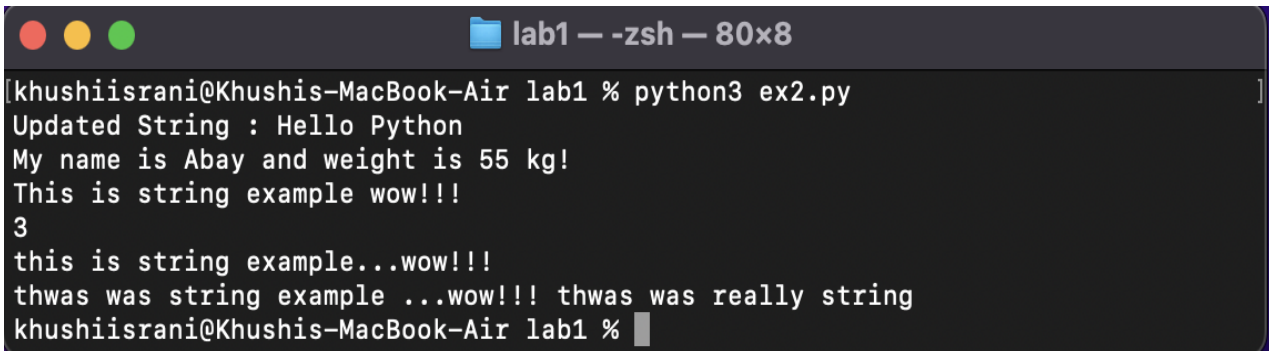
```
khushiisrani@Khushis-MacBook-Air lab1 %
```

```
var1 = 'Hello World!'

print ("Updated String :", var1[:6] + 'Python')
```

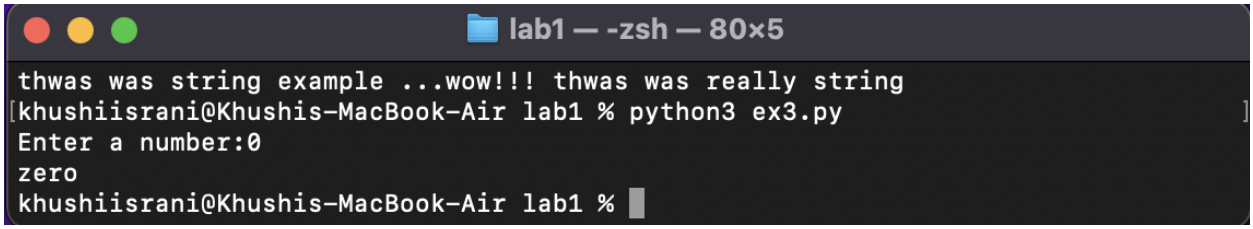
```
print( "My name is %s and weight is %d kg!" % ('Abay', 55))
```

```
str = "this is string example wow!!!";

print (str.capitalize())
```

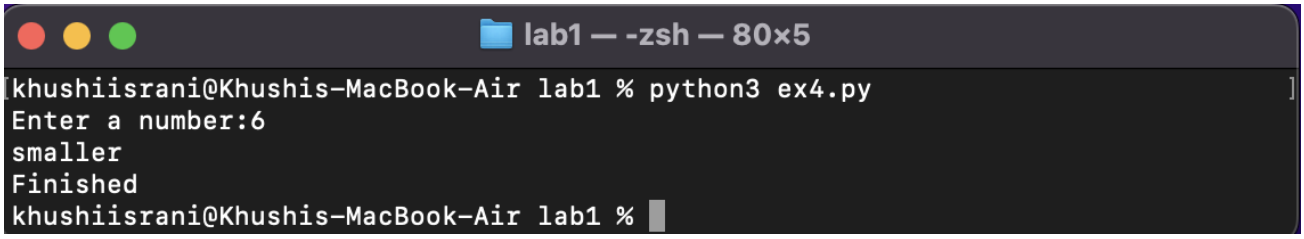
```
str = "this is string example ...wow!!!";

s_count = str.count('s')

print(s_count)


str = "THIS IS STRING EXAMPLE...WOW!!!"; print (str.lower())


str = "this is string example ...wow!!! this is really string";

print (str.replace("is", "was"))
```



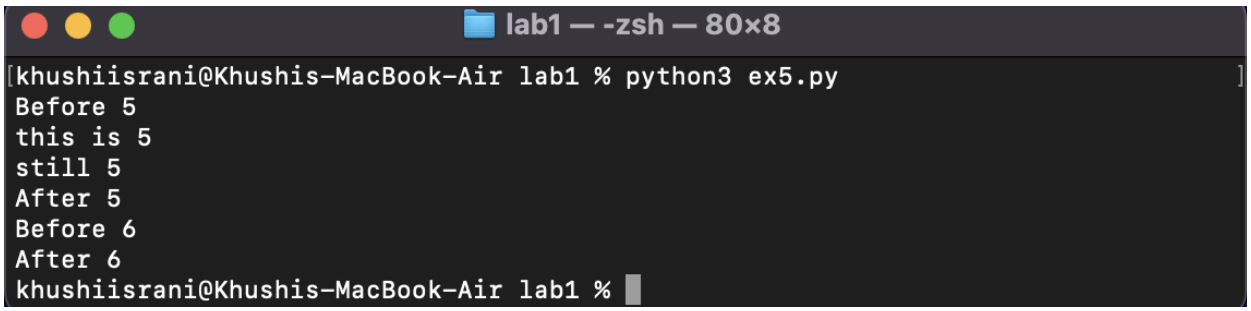

```
num=float(input('Enter a number:'))

if num>0:

print('pos number')

elif num==0:

print('zero')

else:

print('Neg number')
```



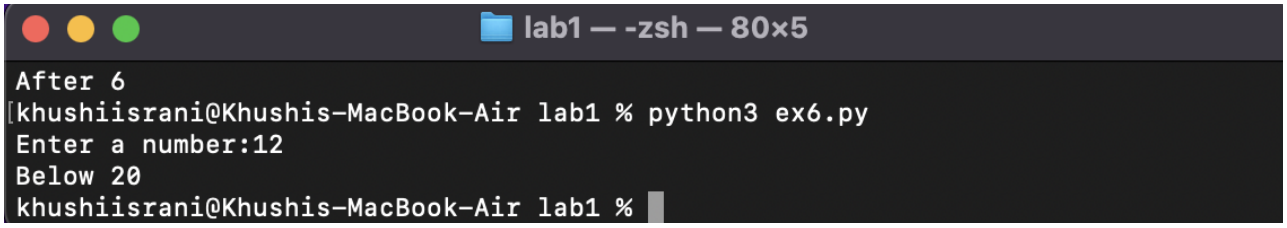

```
x=float(input('Enter a number:'))

if x<10:

print('smaller')

if x>20:

print('bigger')

print('Finished')
```



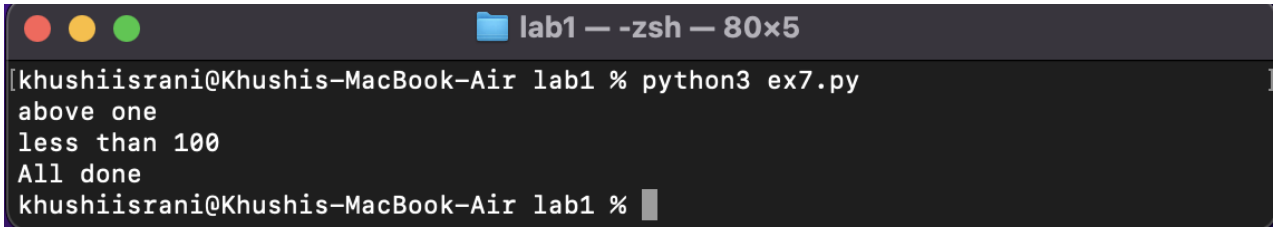

```
x=5

print('Before 5')

if(x==5):

print('this is 5')

print('still 5')

print('After 5')

print('Before 6')

if x==6:

print('this is 6')

print('After 6')
```



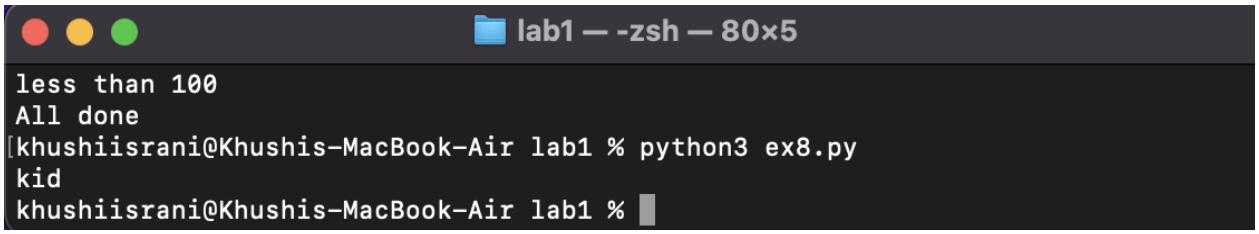

```
x=float(input('Enter a number:'))

if x<20:

print('Below 20')

elif x<10:

print('Below 10')

else:

print('something else')
```



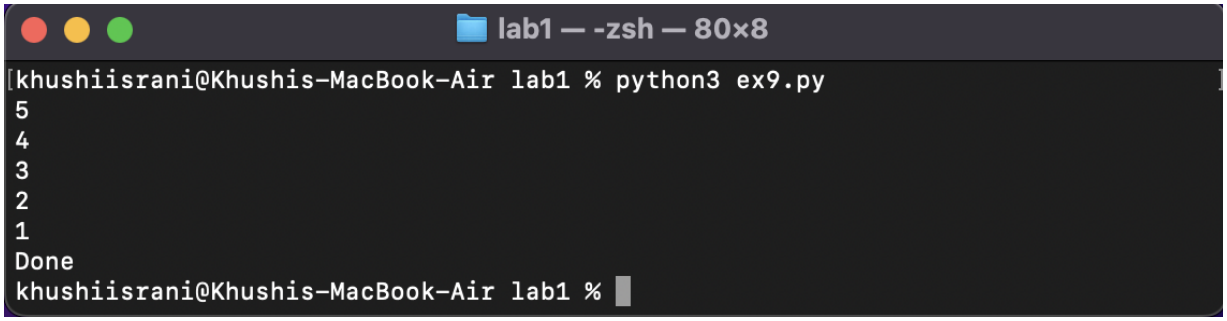
```
x=42

if x>1:

print('above one')

if x<100:

print('less than 100')

print('All done')
```




```
age=15

b=('kid' if age<18 else 'adult')

print(b)
```

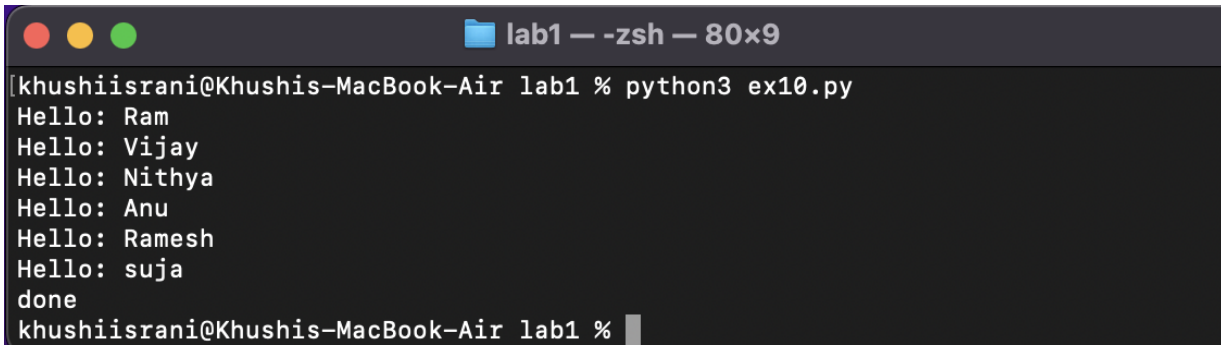



```
for val in [5,4,3,2,1]:

print(val)

print('Done')
```

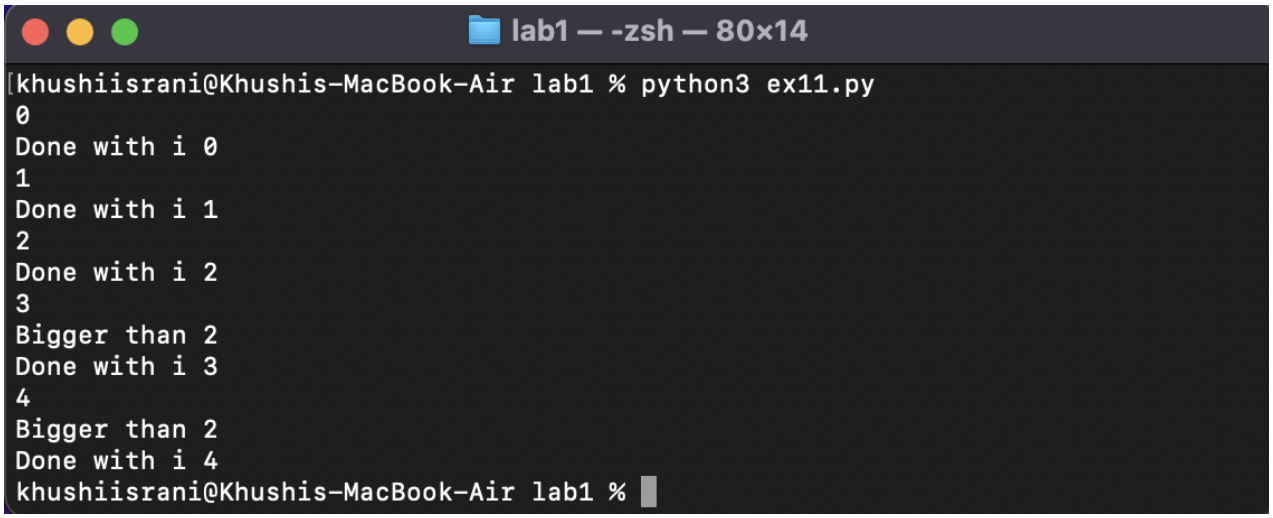



```
stud=['Ram','Vijay','Nithya','Anu','Ramesh','suja']
```

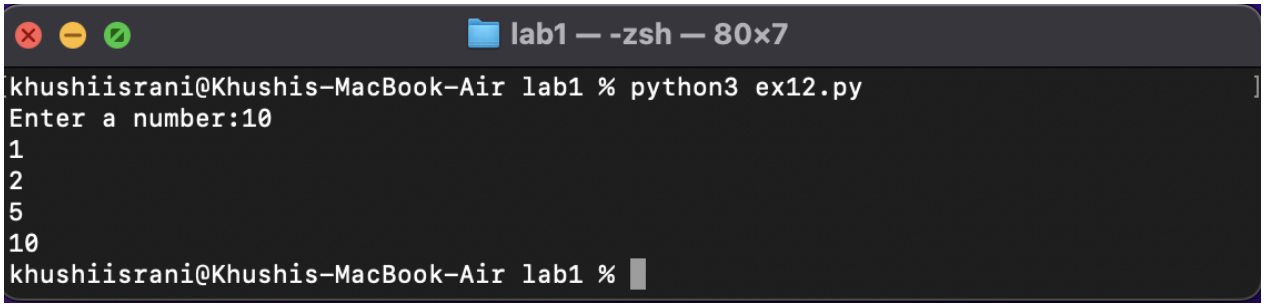
```
for k in stud:

print('Hello:', k)

print('done')
```



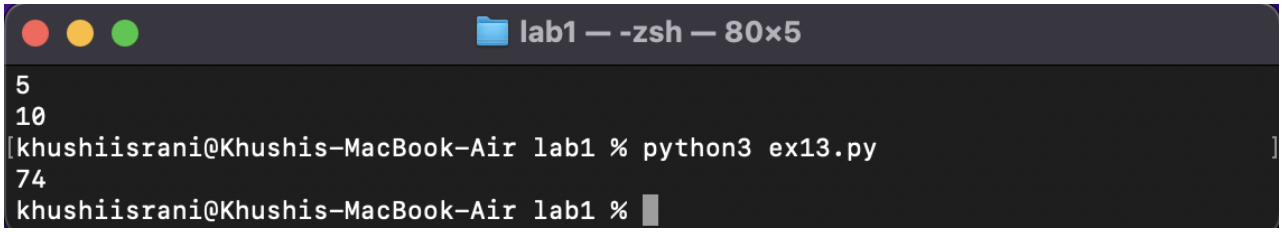

```
for i in range(5):

print(i)

if i>2:

print('Bigger than 2')

print('Done with i', i)
```



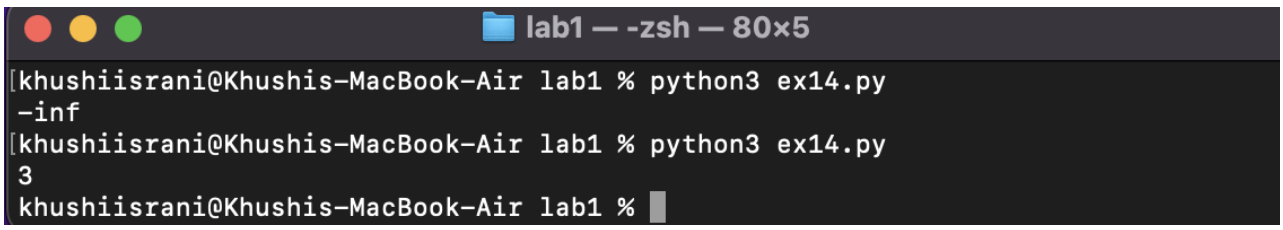

```
x=int(input('Enter a number:'))

for i in range(1,x+1):

if x%i==0:

print(i)
```




```
from math import *

x=[9,41,12,3,74,15]

largest=-inf

for i in x:

if i>largest:

largest=i

print(largest)
```

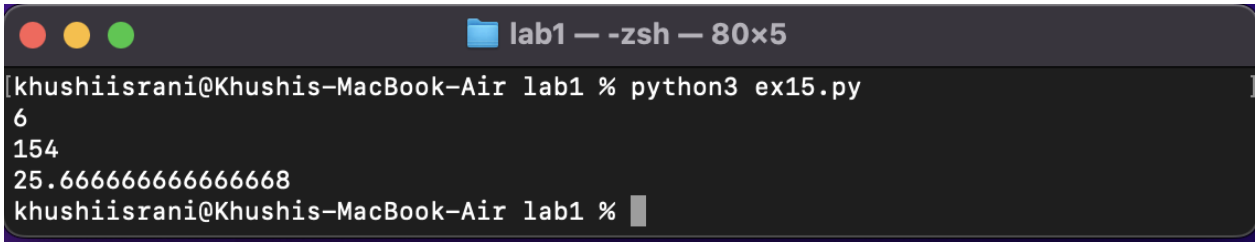



```
from math import *

x=[9,41,12,3,74,15]

smallest=inf

for i in x:

if i<smallest:

smallest=i

print(smallest)
```

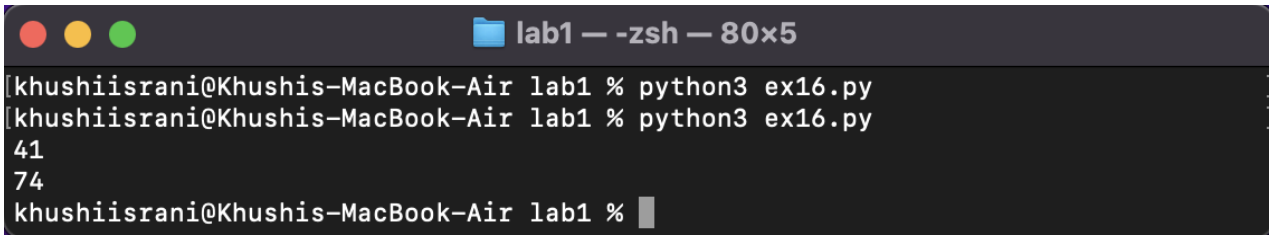



```
x=[9,41,12,3,74,15]
```

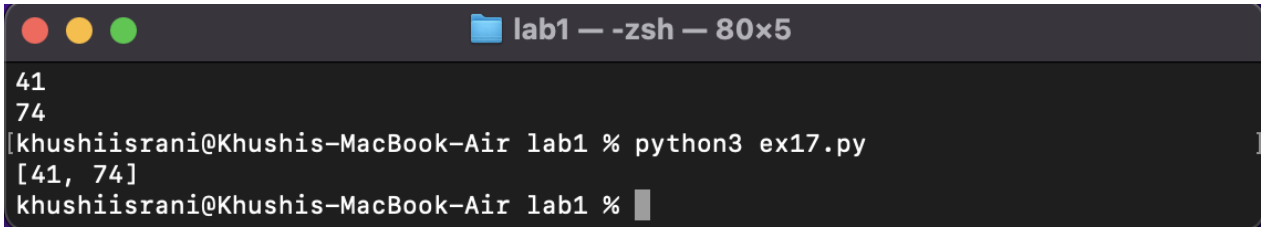
```
count=sum=avg=0

for i in x:

count=count+1

sum=sum+i

avg=sum/count

print(count)

print(sum)

print(avg)
```




```
x=[9, 41, 12, 3, 74, 15]

for i in x:

if i>20:

print (i)
```




```
x= [9, 41, 12, 3, 74, 15]

res=[]

for i in x:

if i>20:

res.append(i)

print(res)
```



price = 100

if price > 100:

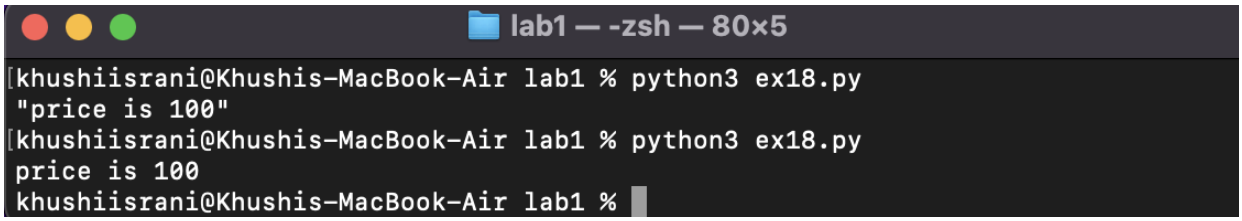
print('price is greater than 100')

elif price == 100:

print('price is 100')

elif price < 100:

print('price is less than 100')



initialize the variable

i= 1

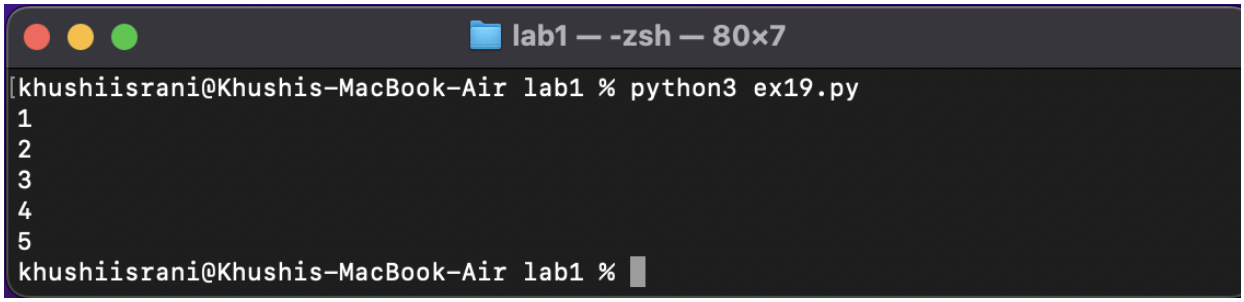
n=5

while loop from i = 1 to 5

while i <= n:

print(i)

i = i+1



total = 0

number = int(input('Enter a number: '))

```
# add numbers until number is zero

while number != 0:

total += number # total = total + number

# take integer input again

number = int(input('Enter a number: '))

print('total =', total)
```