Python

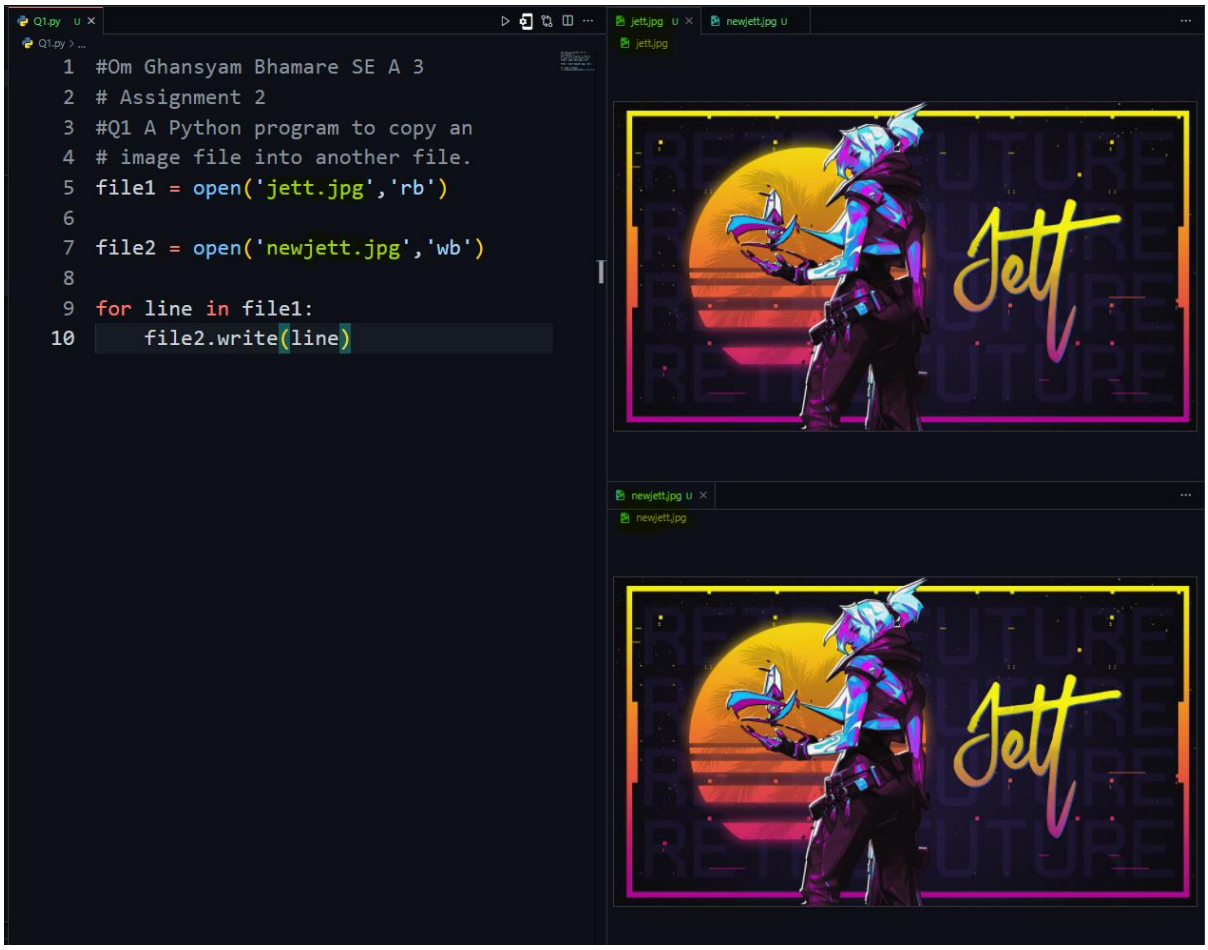
Om Ghanshyam Bhamare

SE A 3

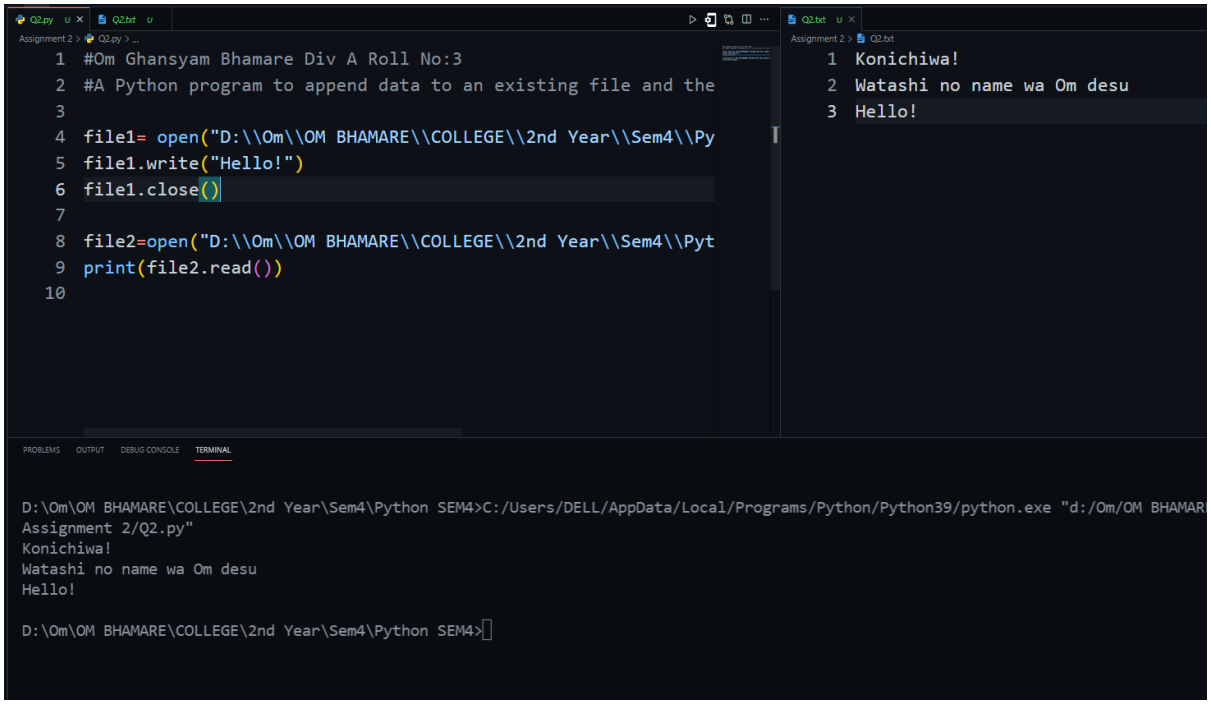
Github: https://github.com/ombhamare4/Python-SEM4.git

Assignment 2

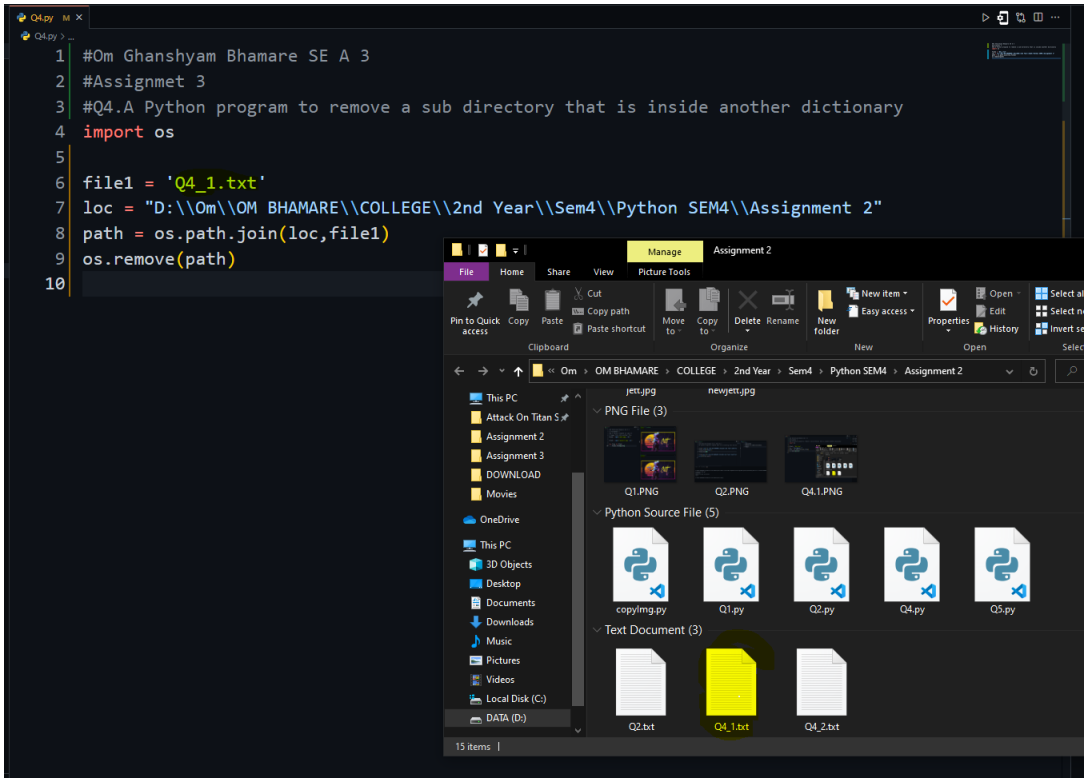
Q1]A Python program to copy an image file into another file.

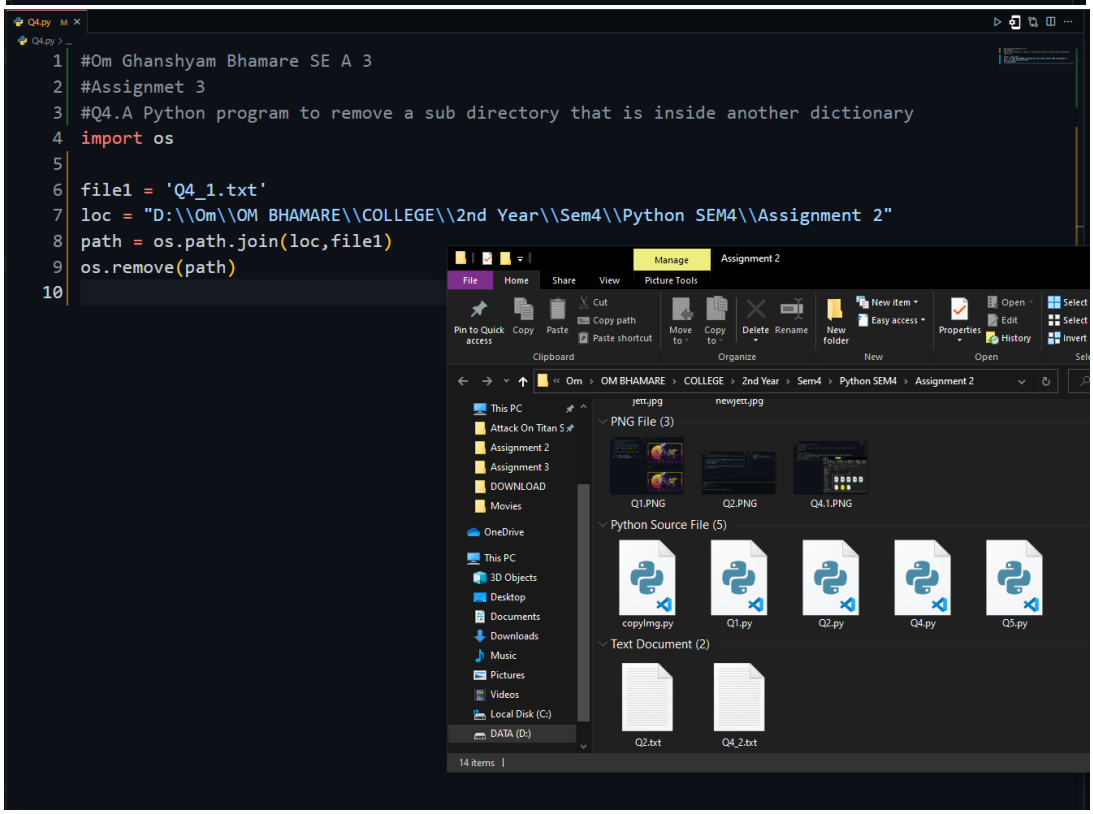


Q2] A Python program to append data to an existing file and then displaying the entire file.

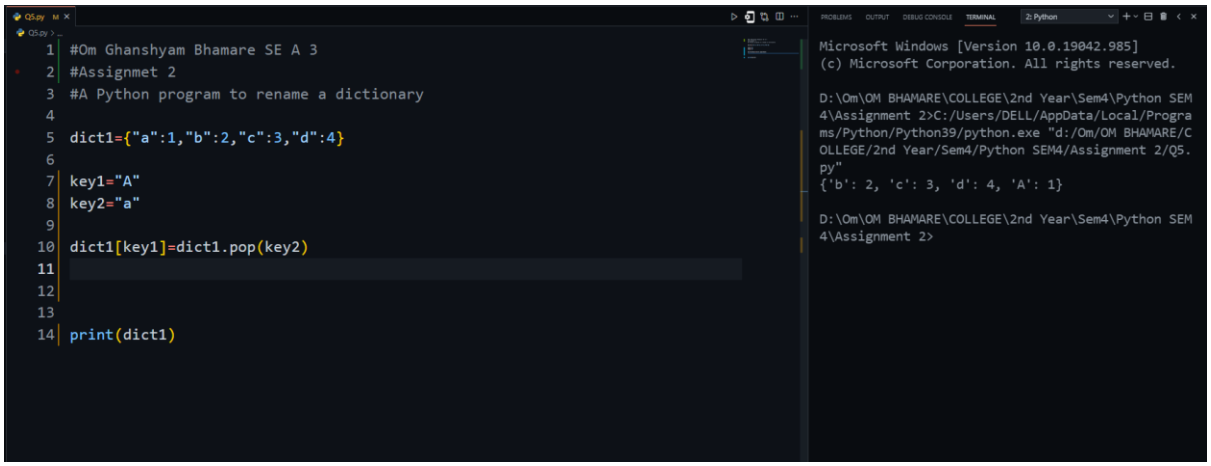


Q4] A Python program to remove a sub directory that is inside another dictionar





Q5] A Python program to rename a dictionary



```
#Om Ghanshyam Bhamare SE A 3
#Assignmet 2
#A Python program to rename a dictionary

dict1={"a":1,"b":2,"c":3,"d":4}

key1="A"
key2="a"

dict1[key1]=dict1.pop(key2)



print(dict1)
```

```
Microsoft Windows [Version 10.0.19042.985]
(c) Microsoft Corporation. All rights reserved.

D:\Om\OM BHAMARE\COLLEGE\2nd Year\Sem4\Python SEM 4\Assignment 2>C:/Users/DELL/AppData/Local/Programs/Python/Python39/python.exe "d:/Om/OM BHAMARE/COLLEGE/2nd Year/Sem4/Python SEM4/Assignment 2/Q5.py"
{'b': 2, 'c': 3, 'd': 4, 'A': 1}

D:\Om\OM BHAMARE\COLLEGE\2nd Year\Sem4\Python SEM 4\Assignment 2>
```

Q6] A Python program to create a package using data structures for a linked list and perform and use all the operations.

```python
#Om Ghanshyam Bhamare SE A 3
#Assignmet 2
#A Python program to create a package using data
# structures for a linked list and perform and use all the
#operations.
from test_package import first
first.info()
first.linkedlist()

```

```
Microsoft Windows [Version 10.0.19042.985]
(c) Microsoft Corporation. All rights reserved.

D:\Om\OM BHAMARE\COLLEGE\2nd Year\Sem4\Python SEM4\Assignment 2>C:/Users/DE
LL/AppData/Local/Programs/Python/Python39/python.exe "d:/Om/OM BHAMARE/COLL
EGE/2nd Year/Sem4/Python SEM4/Assignment 2/ll.py"
Watashi no name om Desu
Linked List
Select Operation
1]Traverse      2]Append
3]Insert        4]Remove
5]Replace       6]Search
7]Length        8]Exit


Enter Your Choice...: 2
Enter Element in Linked list: 1 2 3 4 5
[1, 2, 3, 4, 5]
Linked List
Select Operation
1]Traverse      2]Append
3]Insert        4]Remove
5]Replace       6]Search
7]Length        8]Exit


Enter Your Choice...:
```

```python
#Om Ghanshyam Bhamare SE A 3
#Assignmet 2
#A Python program to create a package using data
# structures for a linked list and perform and use all the
#operations.
def info():
    print("Watashi no name om Desu")

def linkedlist():
    choice=0
    ll=[]
    while(choice!=8):
        print("Linked List\nSelect Operation\n1]Traverse\t2]Appen
        choice=int(input("Enter Your Choice...: "))
        if choice==1:
            for i in ll:
                print(i)
        if choice==2:
            a = input("Enter Element in Linked list: ")
            b = a.split()
            for i in range(len(b)):
                # ll[i]=int(ll[i])
                ll.append(int(b[i]))
            print(ll)
        if choice==3:
            a=int(input("Enter Postion: "))
            b = int(input("Enter Element: "))
            ll.insert(a,b)
        if choice==4:
            if ll==[]:
```

```
Enter Your Choice...: 2
Enter Element in Linked list: 1 2 3 4 5
[1, 2, 3, 4, 5]
Linked List
Select Operation
1]Traverse      2]Append
3]Insert        4]Remove
5]Replace       6]Search
7]Length        8]Exit


Enter Your Choice...: 3
Enter Postion: 2
Enter Element: 12
Linked List
Select Operation
1]Traverse      2]Append
3]Insert        4]Remove
5]Replace       6]Search
7]Length        8]Exit


Enter Your Choice...: 1
1
2
12
3
4
5
Linked List
Select Operation
1]Traverse      2]Append
3]Insert        4]Remove
5]Replace       6]Search
7]Length        8]Exit


Enter Your Choice...:
```

```python
            if ll==[]:
                print("Linked List is Empty: ")
            else:
                a = int(input("Enter Element to remove: "))
                ll.remove(a)
        if choice==5:
            n =int(input("Enter the Element to Remove: "))
            b=int(input("Enter New Element: "))
            if n in ll:
                i=ll.index(n)
                ll.pop(i)
                ll.insert(i,b)
        if choice==6:
            a=int(input("Eneter Element to search: "))
            if a in ll:
                print("Element found...")
            else:
                print("Element Not Fouund...")
        if choice==7:
            length=len(ll)
            print(length)
        if choice==8:
            break


```

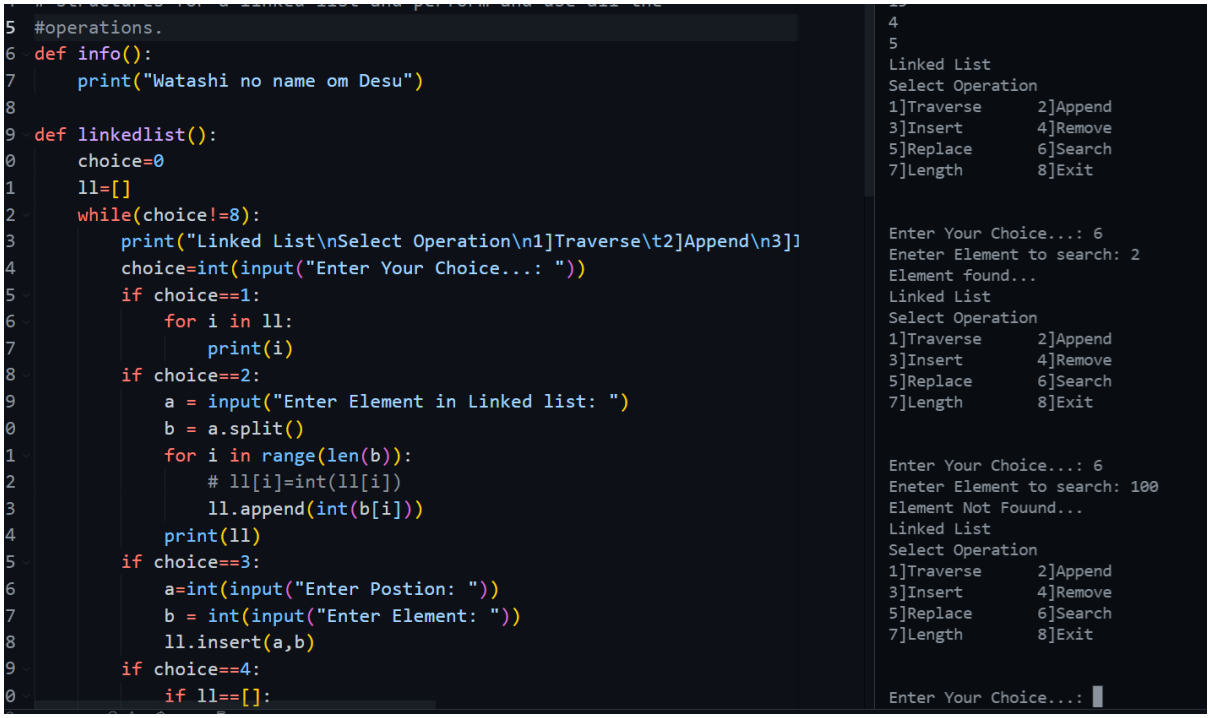
```
2
12
3
4
5
Linked List
Select Operation
1]Traverse      2]Append
3]Insert        4]Remove
5]Replace       6]Search
7]Length        8]Exit


Enter Your Choice...: 4
Enter Element to remove: 12
Linked List
Select Operation
1]Traverse      2]Append
3]Insert        4]Remove
5]Replace       6]Search
7]Length        8]Exit


Enter Your Choice...: 1
1
2
3
4
5
Linked List
Select Operation
1]Traverse      2]Append
3]Insert        4]Remove
5]Replace       6]Search
7]Length        8]Exit


Enter Your Choice...:
```

```python
#Om Ghanshyam Bhamare SE A 3
#Assignmet 2
#A Python program to create a package using data
# structures for a linked list and perform and use all the
#operations.
def info():
    print("Watashi no name om Desu")

def linkedlist():
    choice=0
    ll=[]
    while(choice!=8):
        print("Linked List\nSelect Operation\n1]Traverse\t2]Append\n3]I
        choice=int(input("Enter Your Choice...: "))
        if choice==1:
            for i in ll:
                print(i)
        if choice==2:
            a = input("Enter Element in Linked list: ")
            b = a.split()
            for i in range(len(b)):
                # ll[i]=int(ll[i])
                ll.append(int(b[i]))
            print(ll)
        if choice==3:
            a=int(input("Enter Postion: "))
            b = int(input("Enter Element: "))
            ll.insert(a,b)
        if choice==4:
            if ll==[]:
```

```
2
3
4
5
Linked List
Select Operation
1]Traverse      2]Append
3]Insert        4]Remove
5]Replace       6]Search
7]Length        8]Exit


Enter Your Choice...: 5
Enter the Element to Remove: 3
Enter New Element: 15
Linked List
Select Operation
1]Traverse      2]Append
3]Insert        4]Remove
5]Replace       6]Search
7]Length        8]Exit


Enter Your Choice...: 1
1
2
15
4
5
Linked List
Select Operation
1]Traverse      2]Append
3]Insert        4]Remove
5]Replace       6]Search
7]Length        8]Exit


Enter Your Choice...:
```

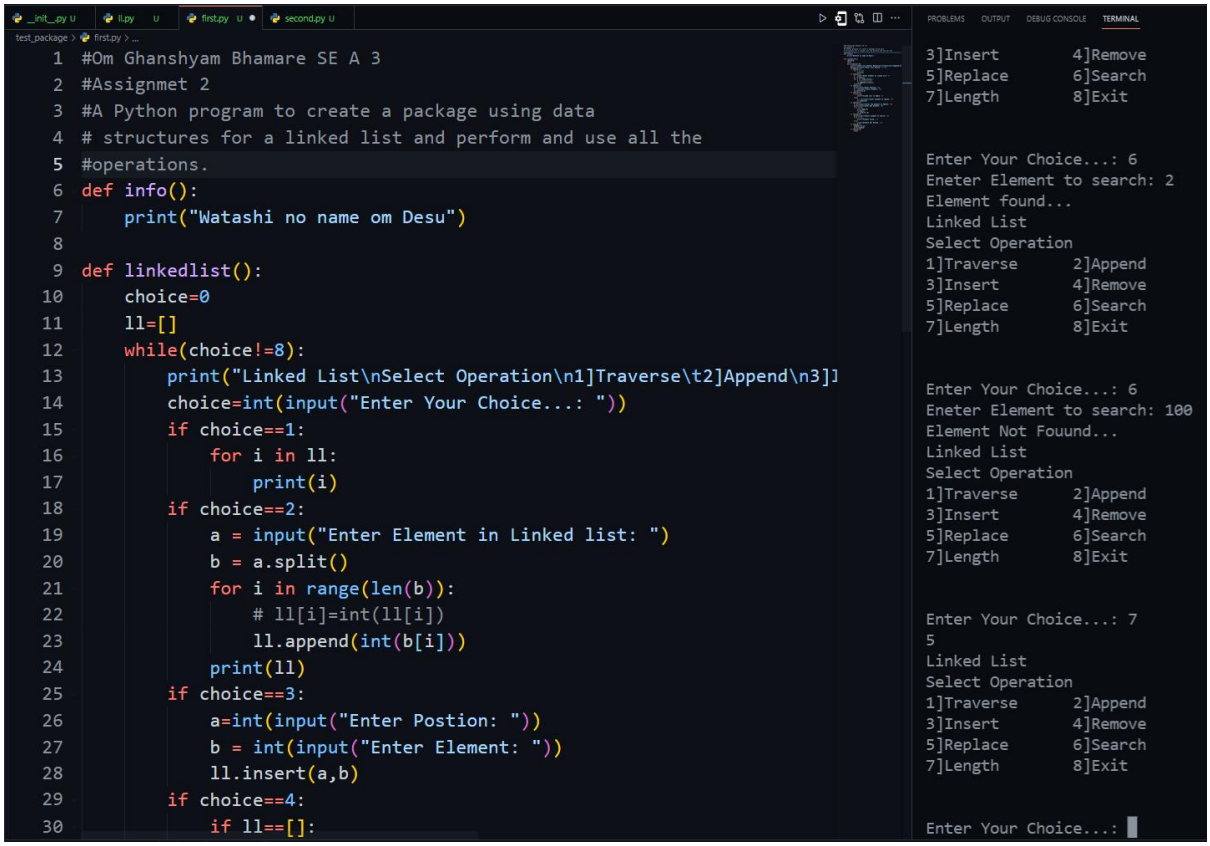

```python
#operations.
def info():
    print("Watashi no name om Desu")

def linkedlist():
    choice=0
    ll=[]
    while(choice!=8):
        print("Linked List\nSelect Operation\n1]Traverse\t2]Append\n3]I
        choice=int(input("Enter Your Choice...: "))
        if choice==1:
            for i in ll:
                print(i)
        if choice==2:
            a = input("Enter Element in Linked list: ")
            b = a.split()
            for i in range(len(b)):
                # ll[i]=int(ll[i])
                ll.append(int(b[i]))
            print(ll)
        if choice==3:
            a=int(input("Enter Postion: "))
            b = int(input("Enter Element: "))
            ll.insert(a,b)
        if choice==4:
            if ll==[]:
```


```
Select Operation
1]Traverse      2]Append
3]Insert        4]Remove
5]Replace       6]Search
7]Length        8]Exit


Enter Your Choice...: 1
1
2
15
4
5
Linked List
Select Operation
1]Traverse      2]Append
3]Insert        4]Remove
5]Replace       6]Search
7]Length        8]Exit


Enter Your Choice...: 6
Eneter Element to search: 2
Element found...
Linked List
Select Operation
1]Traverse      2]Append
3]Insert        4]Remove
5]Replace       6]Search
7]Length        8]Exit


Enter Your Choice...:
```



```
#operations.
def info():
    print("Watashi no name om Desu")

def linkedlist():
    choice=0
    ll=[]
    while(choice!=8):
        print("Linked List\nSelect Operation\n1]Traverse\t2]Append\n3]I
        choice=int(input("Enter Your Choice...: "))
        if choice==1:
            for i in ll:
                print(i)
        if choice==2:
            a = input("Enter Element in Linked list: ")
            b = a.split()
            for i in range(len(b)):
                # ll[i]=int(ll[i])
                ll.append(int(b[i]))
            print(ll)
        if choice==3:
            a=int(input("Enter Postion: "))
            b = int(input("Enter Element: "))
            ll.insert(a,b)
        if choice==4:
            if ll==[]:
```

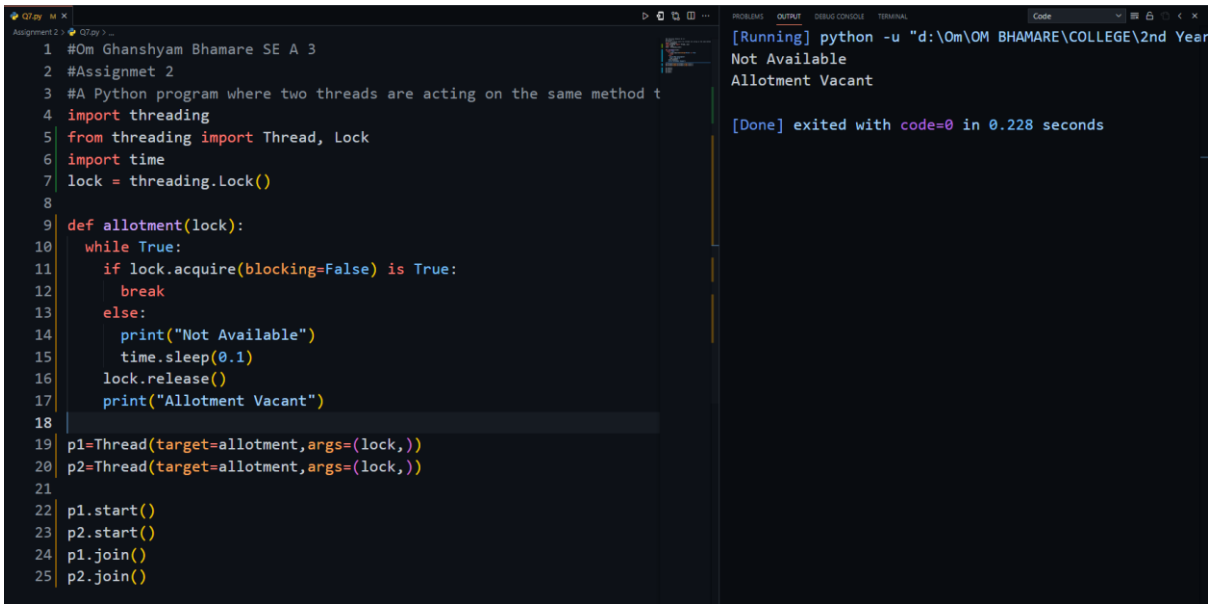
```
4
5
Linked List
Select Operation
1]Traverse      2]Append
3]Insert        4]Remove
5]Replace       6]Search
7]Length        8]Exit


Enter Your Choice...: 6
Eneter Element to search: 2
Element found...
Linked List
Select Operation
1]Traverse      2]Append
3]Insert        4]Remove
5]Replace       6]Search
7]Length        8]Exit


Enter Your Choice...: 6
Eneter Element to search: 100
Element Not Fouund...
Linked List
Select Operation
1]Traverse      2]Append
3]Insert        4]Remove
5]Replace       6]Search
7]Length        8]Exit


Enter Your Choice...:
```



```
#Om Ghanshyam Bhamare SE A 3
#Assignmet 2
#A Python program to create a package using data
# structures for a linked list and perform and use all the
#operations.
def info():
    print("Watashi no name om Desu")

def linkedlist():
    choice=0
    ll=[]
    while(choice!=8):
        print("Linked List\nSelect Operation\n1]Traverse\t2]Append\n3]I
        choice=int(input("Enter Your Choice...: "))
        if choice==1:
            for i in ll:
                print(i)
        if choice==2:
            a = input("Enter Element in Linked list: ")
            b = a.split()
            for i in range(len(b)):
                # ll[i]=int(ll[i])
                ll.append(int(b[i]))
            print(ll)
        if choice==3:
            a=int(input("Enter Postion: "))
            b = int(input("Enter Element: "))
            ll.insert(a,b)
        if choice==4:
            if ll==[]:
```

```
3]Insert        4]Remove
5]Replace       6]Search
7]Length        8]Exit


Enter Your Choice...: 6
Eneter Element to search: 2
Element found...
Linked List
Select Operation
1]Traverse      2]Append
3]Insert        4]Remove
5]Replace       6]Search
7]Length        8]Exit


Enter Your Choice...: 6
Eneter Element to search: 100
Element Not Fouund...
Linked List
Select Operation
1]Traverse      2]Append
3]Insert        4]Remove
5]Replace       6]Search
7]Length        8]Exit


Enter Your Choice...: 7
5
Linked List
Select Operation
1]Traverse      2]Append
3]Insert        4]Remove
5]Replace       6]Search
7]Length        8]Exit


Enter Your Choice...:
```

Q7] A Python program where two threads are acting on the same method to allot a berth for the passenger



```python
#Om Ghanshyam Bhamare SE A 3
#Assignmet 2
#A Python program where two threads are acting on the same method t
import threading
from threading import Thread, Lock
import time
lock = threading.Lock()

def allotment(lock):
  while True:
    if lock.acquire(blocking=False) is True:
      break
    else:
      print("Not Available")
      time.sleep(0.1)
    lock.release()
    print("Allotment Vacant")

p1=Thread(target=allotment,args=(lock,))
p2=Thread(target=allotment,args=(lock,))

p1.start()
p2.start()
p1.join()
p2.join()
```

```
[Running] python -u "d:\Om\OM BHAMARE\COLLEGE\2nd Year
Not Available
Allotment Vacant

[Done] exited with code=0 in 0.228 seconds
```