

#binary search algorithm

```
'''num=int(input("enter number to search"))
list=[1,2,3,4,5,6,7,8,9,10]
low=0
high=9
key=0
while(low<=high):
    mid=int((low+high)/2)
    if(list[mid]==num):
        print("key found at index",mid)
        exit()
    elif(num>list[mid]):
        low=mid+1
    elif(num<list[mid]):
        high=mid-1

print("number not found")'''
```

#implementing stack using python

```
'''class stack:
    def __init__(self):
        self.values=[]
    def push(self,x) :
        self.values=[x]+self.values
    def pop(self):
        return self.values.pop(0)
s=stack()
s.push(10)
s.push(20)
s.push(30)
s.push(40)
s.pop()
s.pop()
print(s.values) '''
```

#implementing queue using python

```
'''class queue:
    def __init__(self):
        self.values=[]
    def enqueue(self,x):
        self.values.append(x)
    def dequeue(self):
        front=self.values[0]
        self.values=self.values[1:]
        return front
q=queue()
q.enqueue(10)
q.enqueue(20)
q.enqueue(30)
q.enqueue(40)
q.dequeue()
print(q.values)'''
```