## - Priority Queue

```
class PriorityQueue(object):
    def __init__(self):
        self.queue = []
    def __str__(self):
        return ' '.join([str(i) for i in self.queue])
    def insert(self, data):
        self.queue.append(data)
        print("The queue is:",self.queue,'\n')
    def delete(self):
        print("Removed element is:", max(self.queue), '\n')
        self.queue.remove(max(self.queue))
    def peek(self):
        print("Top most element is:",max(self.queue),'\n')
        print("Size of the queue is:",len(self.queue),'\n')
queue=PriorityQueue()
flag=True
while(flag):
    print("Priority Queue")
    print("1.To add and print")
    print("2.To remove and print")
    print("3.To peek")
    print("4.To get size")
    print("5.Print the queue")
    print("6.Exit")
    choice=int(input())
    if choice==1:
        data=input("Enter the data:")
        queue.insert(data)
    elif choice==2:
        queue.delete()
    elif choice==3:
        queue.peek()
    elif choice==4:
        queue.size()
    elif choice==5:
        print("The queue is:",queue,'\n')
    elif choice==6:
        flag=False
    Priority Queue
    1.To add and print
    2.To remove and print
    3.To peek
    4.To get size
    5.Print the queue
    6.Exit
    Enter the data:12
    The queue is: ['12']
    Priority Queue
    1.To add and print
    2.To remove and print
    3.To peek
    4.To get size
    5.Print the queue
    6.Exit
    Enter the data:23
    The queue is: ['12', '23']
    Priority Queue
    1.To add and print
    2.To remove and print
    3.To peek
    4.To get size
    5.Print the queue
    6.Exit
```

```
Enter the data:34
The queue is: ['12', '23', '34']

Priority Queue
1.To add and print
2.To remove and print
3.To peek
4.To get size
5.Print the queue
6.Exit
2
Removed element is: 34

Priority Queue
1.To add and print
2.To remove and print
3.To peek
4.To get size
5.Print the queue
6.Exit
3
Top most element is: 23

Priority Queue
1.To add and print
2.To remove and print
3.To peek
4.To get size
5.Print the queue
6.Exit
3
Top most element is: 23
```

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