

Queue with linked list

```
class nd:
    def __init__(self,data):
        self.data=data
        self.next=None
class Queue:
    def __init__(self):
        self.front=None
        self.rear=None
    def isemp(self):
        return self.front is None
    def enqueue(self,data):
        nd1=nd(data)
        if self.rear is None:
            self.front=self.rear=nd1
            return
        self.rear.next=nd1
        self.rear=nd1
    def dequeue(self):
        if self.isemp():
            return None
        temp=self.front
        self.front=temp.next
        if self.front is None:
            self.rear=None
        return temp.data
    def display(self):
        cur=self.front
        while cur:
            print(cur.data, end=' ')
            cur=cur.next
        print()
```

```
q=Queue()
```

```
q.enqueue(20)
```

```
q.enqueue(10)
```

```
q.enqueue(30)
```

```
q.enqueue(40)
```

```
q.enqueue(90)
```

```
q.display()
```

```
20 10 30 40 90
```

```
q.dequeue()
```

```
q.display()
```

```
10 30 40 90
```

```
q.isemp()
```

False

Function to reverse a queue

```
def reverse(a):  
    queue=a  
    l=len(queue)  
    print(queue[::-1])  
  
inp=[20,30,100,60,340]  
reverse(inp)  
[340, 60, 100, 30, 20]
```

1. You are given a function. Check Password(char,n);The function accepts string str of size n as an argument. Implement the function which returns 1 if the given str is valid password else zero. str is a valid password if it satisfies the following conditions:
  - At least has 4 character
  - At least one numeric digit
  - at least one capital letter
  - must not have space or slash(/)
  - starting character must not be a number

```
def Check_Password(char,n):  
  
    if len(char)<4:  
        return 0  
    digit=any(c.isdigit() for c in char)  
    upper=any(c.isupper() for c in char)  
    special_char=any(c in [' ','/'] for c in char)  
    if digit and upper and not special_char:  
        return 1  
    else:  
        return 0  
  
Check_Password('aBc21b',6)  
1  
Check_Password('anc21b',6)  
0
```