

14/12/20

CN LAB

Leaky Bucket Writeup

```
class LeakyBucket:
```

```
    def __init__(self, bsize, istream, orate):
```

```
        self.size = bsize
```

```
        self.queue = istream
```

```
        self.flow = orate
```

```
    def cong_cont(self):
```

```
        buf = 0
```

```
        for pkt in self.queue:
```

```
            print(f"Incoming Packet: {pkt}")
```

```
            n = self.size - buf
```

```
            if pkt < n:
```

```
                buf += pkt
```

```
            else:
```

```
                buf = self.size
```

```
                print(f"buffer: {buf}")
```

```
                buf -= self.flow
```

```
                print(f"Buffer: {buf} | Packets sent: {sent} | Flow: {flow}")
```

```
            while buf > 0:
```

```
                sent = self.flow if self.flow < buf else buf
```

```
                buf -= sent
```

```
                print(f"{buf} | {sent}")
```

```
istream = [int(x) for x in input().split(' ')]
```

```
bsize = int(input())
```

```
orate = int(input())
```

```
net = LeakyBucket(bsize, istream, orate)
```

```
net.cong_cont()
```