

Leaky bucket Algorithm

```
if __name__ == "__main__":
    storage = 0 # initial bucket storage
```

```
# max bucket size
```

```
bucket_size = int(input("Enter max bucket capacity:"))
```

```
size_left = bucket_size
```

```
# number of packets going out
```

```
output_size = int(input("Enter output rate:"))
```

```
# name of two buckets content is checked
```

```
queries = int(input("Enter number of times bucket is checked"))
```

```
for i in range(queries):
```

```
    size_left = bucket_size - storage # space left
```

```
    print("packet NO ", i, ": ")
```

```
# number of packets coming in at a time
```

```
input_size = int(input("Enter packet size:"))
```

```
if (input_size <= size_left):
```

```
    storage += input_size
```

```
    print("Buffer size = {0} Bucket size = {1}".format(storage, bucket_size))
```

```
    print(input_size, "bytes sent")
```

```
else:
```

```
    print("overflow")
```

```
    print("packet loss = {0} bytes lost".format(input_size))
```

```
# storage is full
```

```
    storage = bucket_size
```

```
    print("Buffer size = {0} Bucket size = {1}".format(storage, bucket_size))
```

```
    storage -= output_size
```