

⑦ Write-Up:

```

bucket-size = int(input("Enter bucket size"))
out-rate = int(input("Enter outgoing rate"))
if (out-rate > bucket-size):
    print("Outgoing rate should be less than bucket size")
else:
    n = int(input("Enter the number of packets"))
    stored = 0
    for i in range(0, n):
        print("Packet: ", i)
        inc-pack-size = int(input("Enter packet size: "))
        if (inc-pack-size <= bucket-size - stored):
            stored += inc-pack-size
            print("Bucket output successful")
            print("Bytes sent: ", inc-pack-size)
        else:
            print("Bucket output successful")
            print("Bytes outputted: ", out-rate)
            print("Last bytes sent: ", inc-pack-size - out-rate)
    stored -= out-rate
    if stored < 0:
        stored = 0
        print("Bucket Overflow")
    
```