# initial packets in the bucket

storage = 0

# total no. of times bucket content is checked

no\_of\_queries = 4

# total no. of packets that can

# be accommodated in the bucket

bucket\_size = 10

# no. of packets that enters the bucket at a time

input\_pkt\_size = 4

# no. of packets that exits the bucket at a time

output\_pkt\_size = 1

for i in range(0, no\_of\_queries): # space left

size\_left = bucket\_size - storage

if input\_pkt\_size <= size\_left:

# update storage

storage += input\_pkt\_size

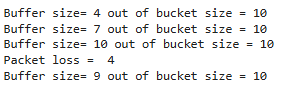
else:

print("Packet loss = ", input\_pkt\_size)

print(f"Buffer size= {storage} out of bucket size = {bucket\_size}")

storage -= output\_pkt\_size

**OUTPUT:**

****