

```
#include<stdio.h>
```

```
int main(){
    int incoming, outgoing, buck_size, n, store = 0;
    printf("Enter bucket size, outgoing rate and no of inputs: ");
    scanf("%d %d %d", &buck_size, &outgoing, &n);

    while (n != 0) {
        printf("Enter the incoming packet size : ");
        scanf("%d", &incoming);
        printf("Incoming packet size %d\n", incoming);
        if (incoming <= (buck_size - store)){
            store += incoming;
            printf("Bucket buffer size %d out of %d\n", store, buck_size);
        } else {
            printf("Dropped %d no of packets\n", incoming - (buck_size - store));
            printf("Bucket buffer size %d out of %d\n", store, buck_size);
            store = buck_size;
        }
        store = store - outgoing;
        if(store < 0)
            store = 0;
        printf("After outgoing %d packets left out of %d in buffer\n", store, buck_size);
        n--;
    }
}
```

Output

```
Enter bucket size, outgoing rate and no of inputs: 100 5 3
Enter the incoming packet size : 25
Incoming packet size 25
Bucket buffer size 25 out of 100
After outgoing 20 packets left out of 100 in buffer
Enter the incoming packet size : 50
Incoming packet size 50
Bucket buffer size 70 out of 100
After outgoing 65 packets left out of 100 in buffer
Enter the incoming packet size : 30
Incoming packet size 30
Bucket buffer size 95 out of 100
After outgoing 90 packets left out of 100 in buffer
```