

## Experiment 14

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**Write a program to demonstrate Leaky Bucket Algorithm.**

### Code:

```
#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;

        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:  
10  
2  
4  
Enter the incoming packet size : 6  
Incoming packet size 6  
Bucket buffer size 6 out of 10  
After outgoing 4 packets left out of 10 in buffer  
Enter the incoming packet size : 8  
Incoming packet size 8  
Dropped 2 no of packets  
Bucket buffer size 4 out of 10  
After outgoing 8 packets left out of 10 in buffer  
Enter the incoming packet size : 2  
Incoming packet size 2  
Bucket buffer size 10 out of 10  
After outgoing 8 packets left out of 10 in buffer  
Enter the incoming packet size : 2  
Incoming packet size 2  
Bucket buffer size 10 out of 10  
After outgoing 8 packets left out of 10 in buffer
```