Program 14

```
Write a program for congestion control using Leaky Bucket algorithm <a href="Code: #include<stdio.h">Code: #include<stdio.h</a>
```

```
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 bytes left out of %d in buffer\n", store, buck size);
    n--;
}
```

Output:

```
Enter bucket size, outgoing rate and no of inputs: 10 3 3
Enter the incoming packet size : 5
Incoming packet size 5
Bucket buffer size 5 out of 10
After outgoing 2 bytes left out of 10 in buffer
Enter the incoming packet size : 5
Incoming packet size 5
Bucket buffer size 7 out of 10
After outgoing 4 bytes left out of 10 in buffer
Enter the incoming packet size : 7
Incoming packet size 7
Dropped 1 no of packets
Bucket buffer size 4 out of 10
After outgoing 7 bytes left out of 10 in buffer
```

Figure 80: Output for Leaky Bucket algorithm

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Experiment no 141
     write a program for conjustion control way
Leaky bucket algorithm -
 Codel
# meluar < stolio, h?
int maint ? {
       int moning, outgoing, buck six, n, ston = 0:
       printfl "Enter bucketion, outgoing mate and no y
               inputs: ");
        scanf ( " % od % od ) & builting, & outgoing, & n);
        while (n/=0) {
               points I "Enter the money packet stre: ");
               scare ( " " od ", & incoming ):
                printf ( " Intonuty packet spe "lod In", incoming )
                 if (monny < {buck-size - store)) }
                       printf ( Bucket buffer site lod out of %dlm)
                   3 olse l
                       prontf ("Dropped "led no of packets In")
                              incompy - (bucksize - store));
                       point ("Bucket buffer erre "lod out of
                              "lod In", store, buck-son );
                       Store = buckson;
           store = Store - outgoing i
           printf (" After outgoing "od bytes left out of "lod in
                buffer In ", Store, buckerstell
           n-+; 11 33
```

Figure 81: Observation Book 1

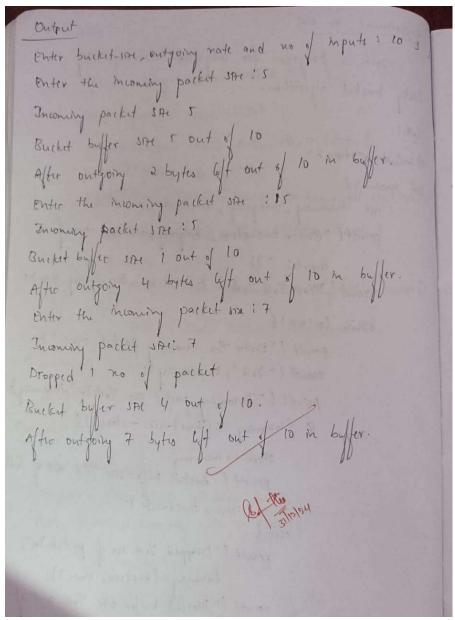


Figure 82: Observation Book 2