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Write a program for congestion control using Leaky Bucket algorithm.

C-code -

```
#include <stdio.h>

int main()
{
   int incoming, outgoing, buck_size, n, store = 0;
   printf (" Enter bucket size :");
   scanf ("%d", &buck_size);
   printf (" Enter outgoing size :");
   scanf ("%d", &outgoing);
   printf (" Enter number of inputs :");
   scanf ("%d", &n);

   while (n != 0)
   {
     printf(" Enter the incoming bucket size :");
     scanf ("%d", &incoming);
     if (incoming <= (buck_size - store))
     {
       store += incoming;
       printf(" Bucket buffer size %d out of %
         \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: 5000
Enter outgoing rate: 2000
Enter number of inputs: 2
Enter the incoming packet size: 3000
Bucket buffer size 3000 out of 5000
After outgoing 1000 packets left out of 5000
in buffer
Enter the incoming packet size: 1000
Bucket buffer size 2000 out of 5000
After outgoing 0 packets left out of 5000
in buffer
```

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