5/1/23

EXPERIMENT-9

PAGE NO :
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AIM: Write a program for congestion control using Leaky Bucket algorithm.

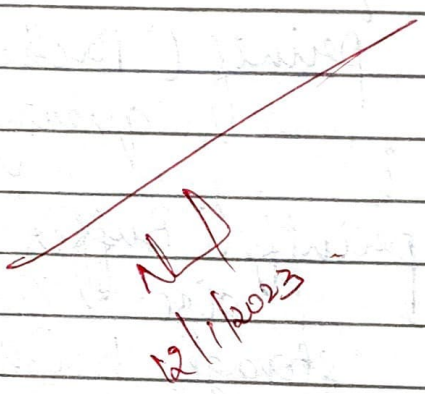
```
#include <bits/stdc++.h>
using namespace std;
int main()
{
int no_of_queries, storage, output_pkt_size;
int input_pkt_size, bucket_size, size_left;
storage = 0;
int n;
cout << "Enter the number of queries to be made";
cin >> no_of_queries;
int querry [no_of_queries];

cout << "Enter the number of packets to be transmitted for each qurery \n";
for (int i = 0; i < no_of_queries ; i++)
 {
  cin >> querry [i];
 }
  int b;
  cout << "Enter bucket size \n";
  cin >> bucket_size;
 cout << "Enter the constant output packet rate \n";
  cin >> output_pkt_size;

for (int i = 0; i < no_of_queries ; i++)
  {
```

```
size_left = bucket_size - storage;
if (querry[i] <= size_left)
{
    storage += querry[i];
}
else
{
    printf("Packet loss = %d\n",
            querry[i]);
}
printf("Buffer size = %d out of bucket
        size %d\n",
    storage, bucket_size);
storage = output_pkt_size;
}
return 0;
}
```

OUTPUT:

```
Enter the number of queries to be made
4
Enter the number of packets to be trans-
mitted for each query
2
7
5
6
Enter the bucket size
10
Enter the constant output packet rate
1
```

Buffer size = 2 out of bucket size = 10
Buffer size = 8 out of bucket size = 10
Packet loss = 5
Buffer size = 7 out of bucket size = 10
Packet loss = 6
Buffer size = 6 out of bucket size = 10



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