**Program-Leaky Bucket Algorithm**

Aim of the program:

Write a program for congestion control using Leaky bucket algorithm.

Code:

#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;

    // Initial packets in the bucket

    storage = 0;

    // Total number of times bucket content is checked

    no\_of\_queries = 4;

    // Total number of packets that can be accommodated in the bucket

    bucket\_size = 10;

    // Number of packets that enters the bucket at a time

    input\_pkt\_size = 4;

    // Number of packets that exits the bucket at a time

    output\_pkt\_size = 1;

    for (int i = 0; i < no\_of\_queries; i++) {

        // Space left in the bucket

        size\_left = bucket\_size - storage;

        if (input\_pkt\_size <= size\_left) {

            // Update storage

            storage += input\_pkt\_size;

        } else {

            printf("Packet loss = %d\n", input\_pkt\_size);

        }

        printf("Buffer size = %d out of bucket size = %d\n",

               storage, bucket\_size);

        // Decrease storage by packets exiting the bucket

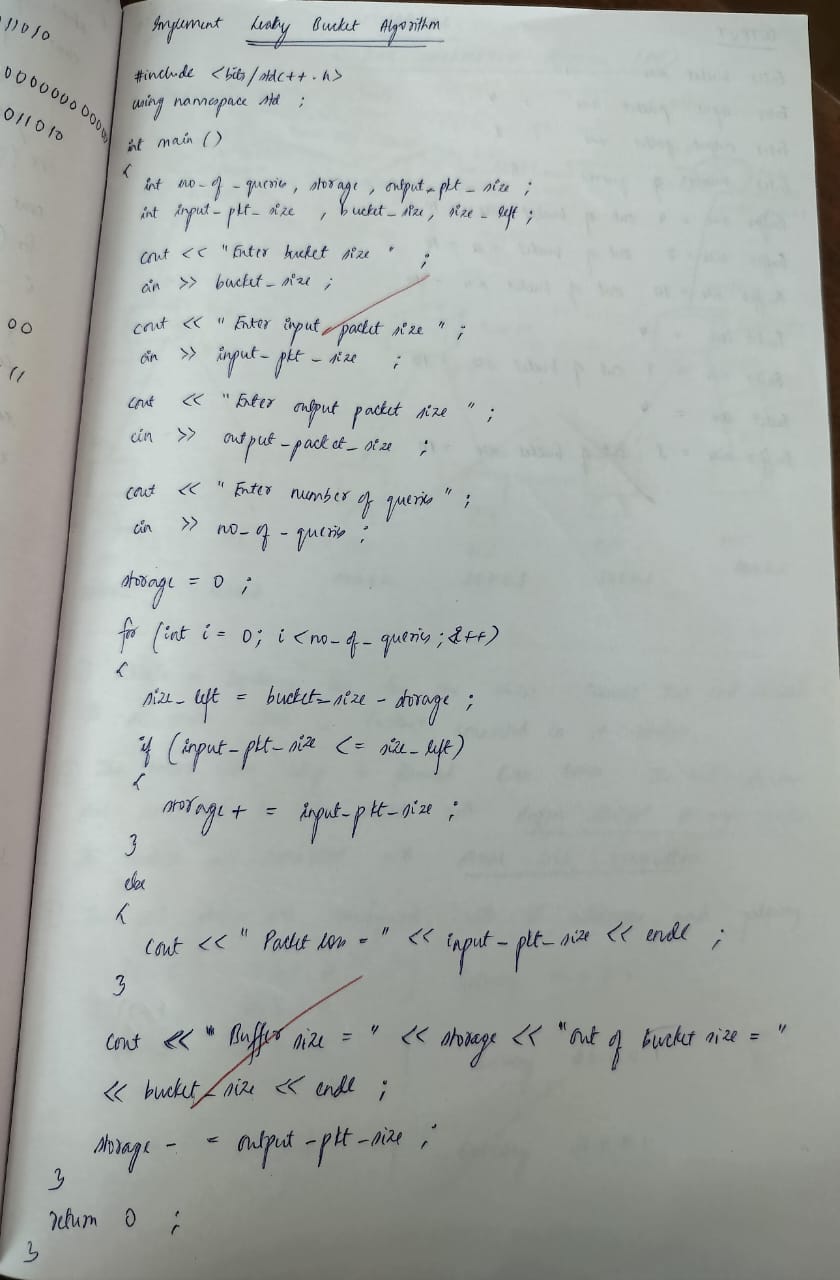
        storage -= output\_pkt\_size;

    }

    return 0;

}

OUTPUT:



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