

Program 14.

Aim: Write a program for congestion control using leaky bucket algorithm.

```
#include <stdio.h>
#include <stdlib.h>

int main()
{
    int bucket, outlets, k=1, num, remaining;
    printf("Enter bucket size and outstream size");
    scanf("%d %d", &bucket, &outlets);
    remaining = bucket;
    while(k);
    {
        num = rand() % 1000;
        if (num < remaining)
        {
            remaining = remaining - num;
            printf("Packets of %d bytes are accepted", num);
        }
        else
        {
            printf("Packets of %d bytes is discarded", num);
        }
        if (bucket - remaining > outlets)
        {
            remaining += outlets;
        }
        else
            remaining = bucket;
    }
}
```

```

while (remaining < buckets)
{
    if (buckets - remaining > outlets)
    {
        remaining += outlets;
    }
    else {
        remaining = buckets;
        printf ("Remaining bytes %d", remaining);
    }
    return 0;
}

```

Output:

Enter bucket size and outstream size

1000 200

Packets of 411 bytes are accepted

Remaining bytes : 1000

If you want to stop press 0, otherwise 1.

packets of 467 bytes are accepted

Remaining bytes 733

If you want to stop press 0, otherwise 1

packets of 334 bytes are accepted

Remaining bytes = 599