

Leaky Bucket

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

int main ()
{
    int input = 0;
    int i = 0, bs;
    printf("Enter bucket limit \n");
    scanf("%d", &bs);
    int op = 1;
    printf("Bucket limit is %d", bs);
    printf("Rate is 50 mbps \n");
    while(op)
    {
        printf("Enter the input \n");
        scanf("%d", &i);
        if(i <= bs && input <= bs)
        {
            input = input + i;
            input = input - 50;
            if(input <= bs)
            {
                if(input < 0)
                {
                    input = 0;
                }
                printf("qty in bucket %d", input);
            }
            else if(input > bs)
            {
                printf("Bucket limit exceeded");
            }
        }
        else
        {
            printf("Bucket limit exceeded");
        }
        printf("press 1 to add input, 0 to end");
        scanf("%d", &op);
    }
    return 0;
}
```

Output:-

bucket limit is 400
 Rate is 50 mbps
 enter input
 300
 qty in bucket 250
 press 1 to add input 0 to end)

300

bucket list exceeded.
press 1 to add

enter input

50

qty in bucket 25.

War
12-1-2023