17/8/23 Lab-14

congestion control using Leaky bucket algorithm

```
#include<stdio.h>
#include<stdlib.h>
int main()
{
 int buckets, outlets, R = 1, num, remaining;
 printf("Enter Bucket size and outstream size\n");
 scanf("%d %d", &buckets, &outlets);
 remaining = buckets;
while(R)
{
 num = rand() % 1000;
 if(num < remaining)
 {
  remaining = remaining - num;
  printf(" Packet of %d bytes accepted\n", num);
 }
 else
 { printf("Packet of %d bytes is discarded\n", num);
 }
 if(buckets - remaining > outlets)
 {
   remaining += outlet;
 } else
  remaining = buckets;
printf("Remaining bytes %d\n", remaining);
printf("If you want to stop input, press 0, Otherwise, press 1\n");
scanf("%d", &R); }
```

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

Output

Enter Bucket size & outstream size 2000 100
Packet of 41 bytes accepted
Remaining bytes: 2000
If you want to stop input, press 0, otherwise, press 1.
Packet of 367 bytes accepted
Packet of 324 bytes accepted
Remaining bytes: 1399
Remaining bytes: 1599
Remaining bytes: 1699
Remaining bytes: 1799
Remaining bytes: 1899
Remaining bytes: 1999
Remaining bytes: 2000

NLP
31/8/2022