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

int min(int x,int y)
{
if(x<y)
return x;
else
return y;
}
 int main()
{
        int drop=0,mini,nsec,cap,count=0,i,inp[25],process;
printf("Enter the bucket size:\n");
scanf("%d", &cap);
printf("Enter the processing rate \n");
scanf("%d",&process);
printf("Enter the number of seconds you want to stimulate \n");
scanf("%d",&nsec);
for(i=0;i<nsec;i++)
{
printf("Enter the size of the packet entering at %d sec \n", i+1);
scanf("%d", &inp[i]);
}
printf("\n Second | Packet received | Packet sent | Packet left | Dropped \n");
printf("-------------------------------------------------------------------------\n");
for(i=0;i<nsec;i++)
{
                count+=inp[i];
```

```
if(count>cap)
{
                                drop=count -cap;
count=cap;
}
printf("%d",i+1);
printf("\t%d",inp[i]);
mini=min(count,process);
printf("\t\t%d",mini);
count=count-mini;
printf("\t\t %d",count);
printf("\t\t %d\n", drop);
drop=0;
}
for(;count!=0;i++)
{
if(count>cap)
{
                                drop=count- cap;
count=cap;
}
printf("%d",i+1);
printf("\t0");
mini=min(count,process);
printf("\t\t%d",mini);
count=count-mini;
printf("\t\t %d",count);
printf("\t\t %d\n", drop);
}
```

}

```
Enter the bucket size:
5
Enter the processing rate
2
Enter the number of seconds you want to stimulate
3
Enter the size of the packet entering at 1 sec
5
Enter the size of the packet entering at 2 sec
4
Enter the size of the packet entering at 3 sec
3

 Second | Packet received | Packet sent | Packet left | Dropped
---------------------------------------------------------------------
1       5               2               3             0
2       4               2               3             2
3       3               2               3             1
4       0               2               1             0
5       0               1               0             0
```