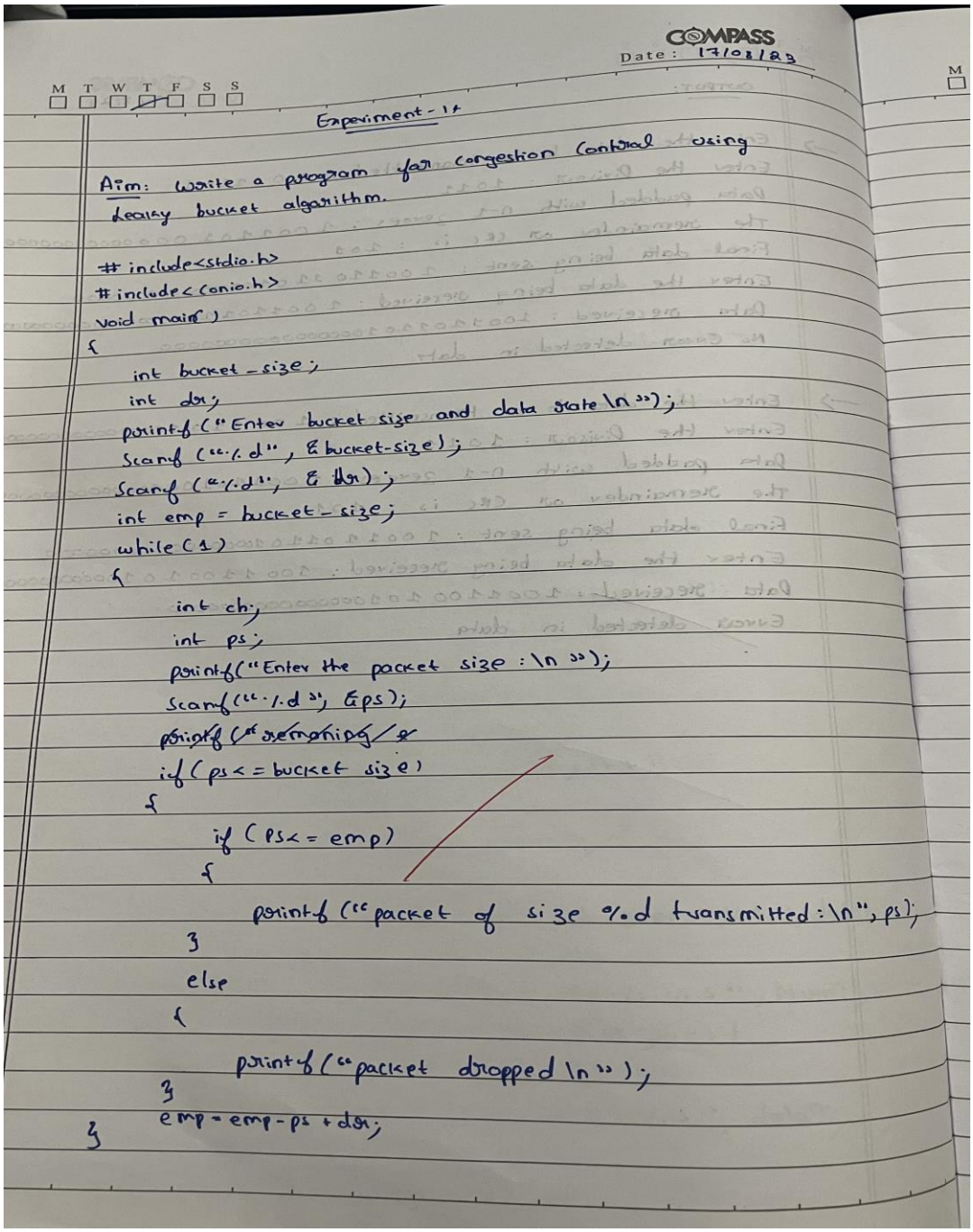
LAB PROGRAM – 14

Q) Write a program for congestion control using Leaky bucket algorithm.

Procedure :



Experiment - 14

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

```
#include<stdio.h>
#include<conio.h>
void main()
{
  int bucket_size;
  int dr;
  printf("Enter bucket size and data rate\n");
  Scanf("%d", &bucket_size);
  Scanf("%d", &dr);
  int emp = bucket_size;
  while(1)
  {
    int ch;
    int ps;
    printf("Enter the packet size :\n");
    Scanf("%d", &ps);
    printf("remaining");
    if(ps<=bucket size)
    {
      if(ps<=emp)
      {
        printf("packet of size %d transmitted:\n", ps);
      }
      else
      {
        printf("packet dropped\n");
      }
      emp = emp - ps + dr;
    }
```

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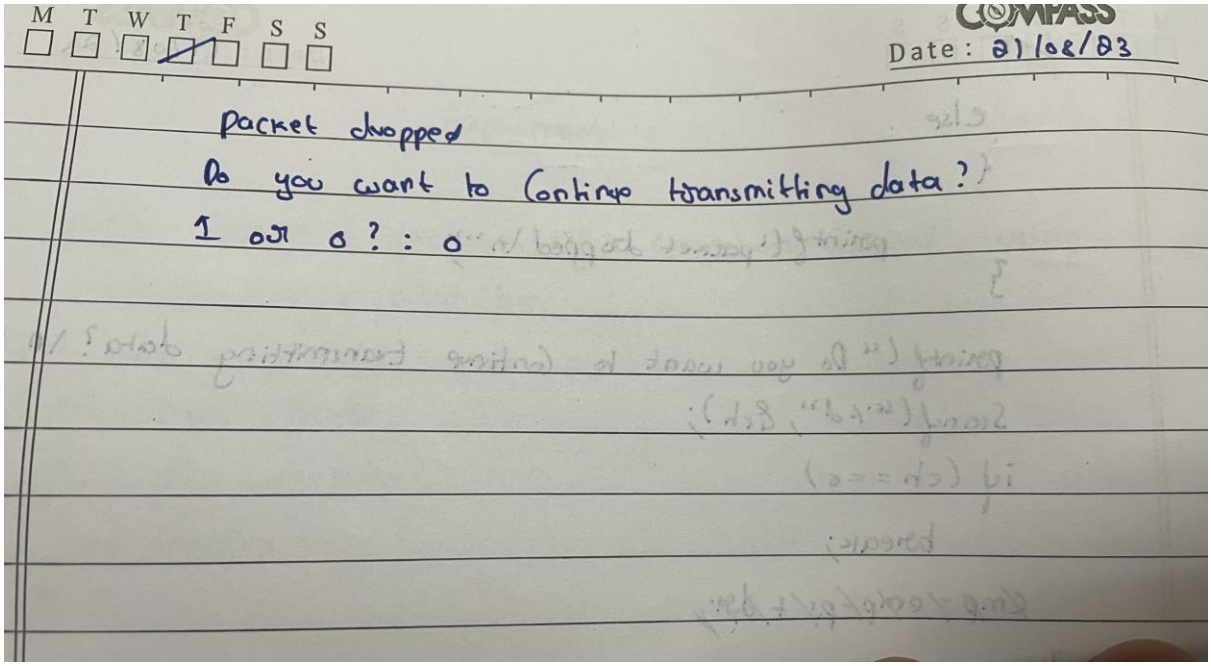
```
        else
        {
            printf("packet dropped\n");
        }
        printf("Do you want to continue transmitting data? \n 1 ovo? :");
        scanf("%d", &ch);
        if (ch == 0)
            break;
    }
}
```

OUTPUT:

Enter bucket size and data rate
5000
200
Enter the packet size:
6000
packet dropped
Do you want to continue transmitting data?
1 or 0 ? : 1
Enter the packet size:
3000
packet of size 3000 transmitted:
Do you want to continue transmitting data?
1 or 0 ? : 1
Enter the packet size:
2000
packet of size 2000 transmitted:
Do you want to continue transmitting data?
1 or 0 ? : 1
Enter the packet size:
1000



Code :

```
#include<stdio.h>
#include<conio.h>
void main()
{
    int bucket_size;
    int dr;
    printf("Enter bucket size and data rate\n");
    scanf("%d",&bucket_size);
    scanf("%d",&dr);
    int emp = bucket_size;
    while(1)
    {
        int ch;
```

```
int ps;
printf("Enter the packet size :\n ");
scanf("%d",&ps);
if(ps<=bucket_size)
{
    if(ps<=emp)
    {
        printf("packet of size %d transmitted :\n",ps);
    }
    else
    {
        printf("packet dropped\n");
    }

}
else
{
    printf("packet dropped\n");
}
printf("Do you want to continue transmitting data?\n 1 or 0? :");
scanf("%d",&ch);
if(ch==0)
{
```

```
            break;
        }
        emp =emp-ps+dr;
    }
}
```

Output :

```
Enter bucket size and data rate
5000
200
Enter the packet size :
 6000
packet dropped
Do you want to continue transmitting data?
 1 or 0? :1
Enter the packet size :
 3000
packet dropped
Do you want to continue transmitting data?
 1 or 0? :1
Enter the packet size :
 2000
packet dropped
Do you want to continue transmitting data?
 1 or 0? :1
Enter the packet size :
 1000
packet dropped
Do you want to continue transmitting data?
 1 or 0? :0
```