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Distributed System Lab

LAB – 9

Aim: Simulate Balanced Sliding Window Protocol in 'C'.

Program:

```
#include<stdio.h>

int main()
{
    int w,i,f,frames[50];

    printf("Enter window size: ");
    scanf("%d",&w);

    printf("\nEnter number of frames to transmit: ");
    scanf("%d",&f);

    printf("\nEnter %d frames: ",f);

    for(i=1;i<=f;i++)
        scanf("%d",&frames[i]);

    printf("\nWith sliding window protocol the frames will be sent in
the following manner (assuming no corruption of frames)\n\n");
    printf("After sending %d frames at each stage sender waits for
acknowledgement sent by the receiver\n\n",w);

    for(i=1;i<=f;i++)
    {
        if(i%w==0)
        {
            printf("%d\n",frames[i]);
            printf("Acknowledgement of above frames sent is received
by sender\n\n");
        }
        else
            printf("%d ",frames[i]);
    }

    if(f%w!=0)
```

```
        printf("\nAcknowledgement of above frames sent is received by
sender\n");

    return 0;
}
```

Output:

```
Enter Window Size: 3
Enter number of frames to transmit: 5
Enter 5 Frames: 12 5 89 4 6
With sliding window protocol the frames will be sent in the following
    manner (assuming no corruption of frames)

After sending 3 frames at each stage sender waits for acknowledgement
    sent by the receiver

12 5 89
Acknowledgement of above frames sent is received by sender

4 6
Acknowledgement of above frames sent is received by sender
```