

Experiment 8

AIM: Write a Program to implement Stop and Wait Protocol.

The Stop and Wait Protocol can be simulated without actual network sockets to demonstrate the core logic. This simulation involves a sender and a receiver, where the sender transmits a frame and waits for an acknowledgment (ACK) before sending the next.

PROGRAM:

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

int main()
{
    int n,i,wait;
    printf("Read number of frames you want send:");
    scanf("%d",&n);
    for(i=1;i<=n;i++)
    {
        printf("\nframe %d send",i);
        wait=rand()%8;
        sleep(5);
        if(wait>5)
        {
            i=i-1;
            continue;
        }
        else
            printf("\nAck received for frame %d",i);
    }
}
```

OUTPUT:

```
Read number of frames you want send:3
```

```
frame 1 send  
frame 1 send  
frame 1 send  
Ack received for frame 1  
frame 2 send  
Ack received for frame 2  
frame 3 send  
Ack received for frame 3
```

```
==== Code Execution Successful ====
```