PROGRAM:

```c
#include<stdio.h>

#include<conio.h>

#include<stdlib.h>

void main() {

int temp1,temp2,temp3,temp4;

int winsize=8;

int noframes,moreframes,i;

int receiver(int);

int simulate(int);

temp1=0;

temp2=0;

temp3=0;

temp4=0;

clrscr();

for(i=0;i<200;i++)

rand();

noframes=5;

printf("\nNo. of frames is %d",noframes);

getch();

moreframes=noframes;

while(moreframes>0)

{

temp1=simulate(winsize);

winsize=temp1;

temp4+=temp1;

if(temp4>noframes)

temp4=noframes;
```

```c
for(i=temp3+1;i<=temp4;i++)

printf("\nSending frame %d",i);

getch();

temp2=receiver(temp1);

temp3+=temp2;

if(temp3>noframes)

temp3=noframes;

printf("\nAcknowledgement for the frames upto %d",temp3);

getch();

 moreframes-=temp2;

temp4+=temp3;

if(winsize<=0)

winsize=8;

 }

printf("\nEnd of SLIDING WINDOW PROTOCOL");

getch();

 }

 int receiver(int temp1)

{

 int i;

for(i=0;i<100;i++)

rand();

i=rand()%temp1;

return 1;

}

int simulate(int winsize)

{

int temp1,i;
```

```
for(i=0;i<50;i++)

temp1=rand();

if(temp1==0)

temp1=simulate(winsize);

i=temp1%winsize;

if(i==0)

return winsize;

else return temp1%winsize;

}
```

OUTPUT:

```
No. of frames is 5
Sending frame 1
Sending frame 2
Sending frame 3
Sending frame 4
Sending frame 5
Acknowledgement for the frames upto 1
Sending frame 2
Sending frame 3
Sending frame 4
Sending frame 5
Acknowledgement for the frames upto 2
Sending frame 3
Sending frame 4
Sending frame 5
Acknowledgement for the frames upto 3
Sending frame 4
Acknowledgement for the frames upto 4
Sending frame 5
Acknowledgement for the frames upto 5
End of SLIDING WINDOW PROTOCOL
```