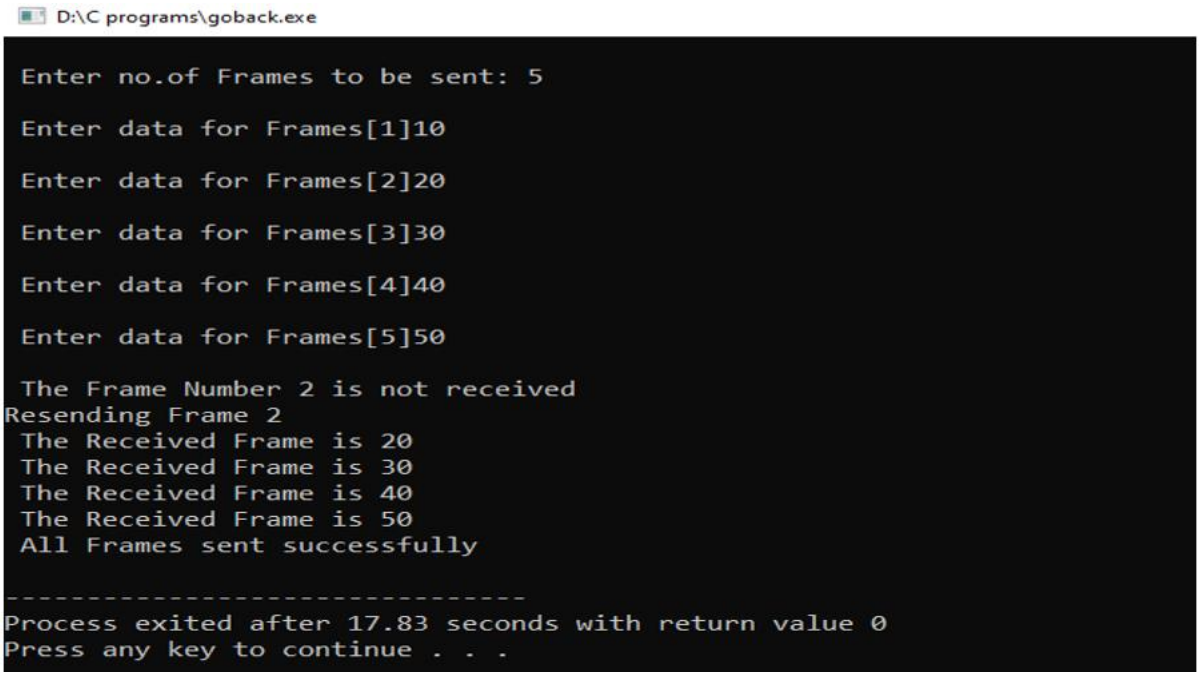
6)Write a Program to implement Sliding window protocol for Goback N.

Program: #include<stdio.h> #include<stdlib.h> #include<math.h> #include<unistd.h>

```
int n,r;
struct frame
{
char ack; int data;
}frm[10];
int sender(void); void recvack(void);
void resend_gb(void); int main()
{
int c; sender(); recvack(); resend_gb();
printf("\n All Frames sent successfully\n");
}
int sender()
{
int i;
printf("\n Enter no.of Frames to be sent: "); scanf("%d",&n);
for(i=1;i<=n;i++)
{
printf("\n Enter data for Frames[%d]",i); scanf("%d",&frm[i].data);
frm[i].ack='y';
}
return 0;
}
void recvack()
{
int i;
rand(); r=rand()%n; frm[r].ack='n'; for(i=1;i<=n;i++)
{
if(frm[i].ack=='n')
printf("\n The Frame Number %d is not received",r);
}
}
void resend_gb()
{
```

```
int i;
printf("\nResending Frame %d",r); for(i=r;i<=n;i++)
{
sleep(2); frm[i].ack='y';
printf("\n The Received Frame is %d",frm[i].data);
}
}
```

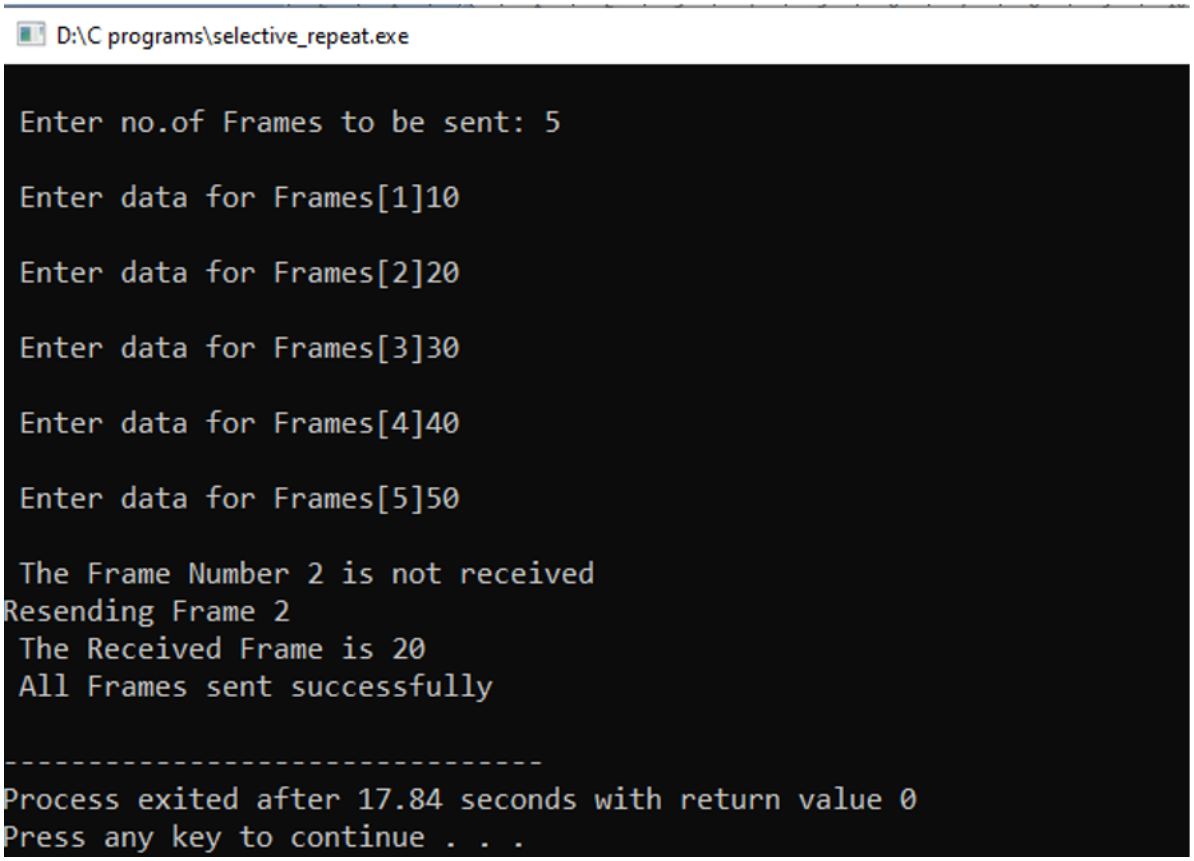
OUTPUT:



7)Write a Program to implement Sliding window protocol for Selective repeat.

```
Program: #include<stdio.h> #include<stdlib.h> #include<math.h> #include<unistd.h>
int n,r;
struct frame
{
char ack; int data;
}frm[10];
int sender(void); void recvack(void); void resend_sr(void); int main()
{
int c; sender(); recvack(); resend_sr();
printf("\n All Frames sent successfully\n");
}
int sender()
{
int i;
printf("\n Enter no.of Frames to be sent: "); scanf("%d",&n);
for(i=1;i<=n;i++)
{
printf("\n Enter data for Frames[%d]",i); scanf("%d",&frm[i].data);
frm[i].ack='y';
}
return 0;
}
void recvack()
{
int   i; rand(); r=rand()%n;
frm[r].ack='n';
{
if(frm[i].ack=='n')
printf("\n The Frame Number %d is not received",r);
}
}
void resend_sr()
{
printf("\nResending Frame %d",r); sleep(2);
frm[r].ack='y';
printf("\n The Received Frame is %d",frm[r].data);
}
```

OUTPUT:


D:\C programs\selective_repeat.exe
Enter no.of Frames to be sent: 5
Enter data for Frames[1]10
Enter data for Frames[2]20
Enter data for Frames[3]30
Enter data for Frames[4]40
Enter data for Frames[5]50
The Frame Number 2 is not received
Resending Frame 2
The Received Frame is 20
All Frames sent successfully
Process exited after 17.84 seconds with return value 0
Press any key to continue . . .