

```

#include<stdio.h>

#include<stdlib.h>

int mutex=1,full=0,empty=3,x=0;

int main()
{
    int n;

    char producer;

    char consumer;

    int wait(int);

    int signal(int);

    printf("\n1.Producer\n2.Consumer\n3.Exit");

    while(1)
    {
        printf("\nEnter your choice:");

        scanf("%d",&n);

        switch(n)
        {
            case 1:  if((mutex==1)&&(full!=0))

                    producer;

                    else

                    printf("Buffer is full!!");

                    break;

            case 2:  if((mutex==1)&&(full!=0))

                    consumer;

                    else

                    printf("Buffer is empty!!");

                    break;

            case 3:

                    exit(0);

                    break;

        }
    }
}

```

```
}  
  
return 0;  
  
}
```

Output:

```
1.Producer  
2.Consumer  
3.Exit  
Enter your choice:1  
Buffer is full!!  
Enter your choice:2  
Buffer is empty!!  
Enter your choice:3  
  
-----  
Process exited after 12.43 seconds with return value 0  
Press any key to continue . . . |
```