

7 d) Write a JAVA program Producer Consumer Problem

AIM: Write a JAVA program Producer Consumer Problem

Program:

class A

{

```
    int n;
    boolean b=false;
    synchronized int get()
    {
        if(!b)
            try
            {
                wait();
            }
        catch(Exception e)
        {
            System.out.println(e);
        }
        System.out.println("Got:"+n);
        b=false;
        notify();
        return n;
    }
```

```
synchronized void put(int n)
```

{

```
    if(b)
        try
        {
            wait();
        }
    catch(Exception e)
    {
        System.out.println(e);
    }
    this.n=n;
    b=true;
    System.out.println("Put:"+n);
    notify();
}
```

}

class producer implements Runnable

{

```
    A a1;
    Thread t1;
    producer(A a1)
    {
        this.a1=a1;
        t1=new Thread(this);
        t1.start();
    }
```

```
    public void run()
    {
```

```
for(int i=1;i<=10;i++)
{
a1.put(i);
}
}
class consumer implements Runnable
{
A a1;
Thread t1;
consumer(A a1)
{
    this.a1=a1;
    t1=new Thread(this);
    t1.start();
}
public void run()
{
    for(int j=1;j<=10;j++)
    {
        a1.get();
    }
}
}
class interdemo
{
    public static void main(String args[])
    {
        A a1=new A();
        producer p1=new producer(a1);
        consumer c1=new consumer(a1);
    }
}
```

Output:

Put:1
Got:1
Put:2
Got:2
Put:3
Got:3
Put:4
Got:4
Put:5
Got:5
Put:6
Got:6
Put:7
Got:7
Put:8
Got:8
Put:9
Got:9
Put:10
Got:10

Exercise – 2 (c)

c) Write a JAVA program using String Buffer to delete, remove character.

Aim: To write a JAVA program using StringBuffer to delete, remove character

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OBJECT ORIENTED PROGRAMMING THROUGH JAVA LAB

Program:

```
class StringBuffer
{
    public static void main(String[] args)
    {
        StringBuffer sb1 = new StringBuffer("Hello World");
        sb1.delete(0,6);
        System.out.println(sb1);

        StringBuffer sb2 = new StringBuffer("Some Content");
        System.out.println(sb2);
        sb2.delete(0, sb2.length());
        System.out.println(sb2);

        StringBuffer sb3 = new StringBuffer("Hello World");
        sb3.deleteCharAt(0);
        System.out.println(sb3);
    }
}
```

Output:

World

Some Content

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