# Producer Consumer Problem Using Inter Thread in java:-

```
Class Q
{
    int num;
    boolean valueSet = false;
    Public Synchronized void Put (int num)
    {
        While (valueSet)
        {
            try
            {
                Wait ();
            }
            Catch (Exception e){}
        }
        System. Out. Println ("Put :" + num)
        this. num = num;
        ValueSet = true;
        notify ();
    }
                    Synchronized
    Public     void get ()
    {
        While (!valueSet)
        {
            try
            {
                Wait();
            }
            Catch (Exception e){}
        }
        System. Out. Println (" Get :" + num);
        valueSet = false;
        notify ();
    }
}
```

```
Class Producer implements reennable
{
                                        (constructor)
    Q q;
    Public Producer (Q q) {
    this.q = q;
        Thread t = new Thread (this, "Producer");
        t. Start ();
    }

    Public Void run()
    {
        int i = 0;
        While (true)
        {
            q. Put (i++);                 (loop)
            try
            {
                Thread. Sleep (1000);
            }
            Catch (Enception e){}
        }
    }
}
```

```
Class Consumer implements Runnable
{
    Q q;
    Public Consumer (Q q)
    {
        this.q = q;
        Thread t = new Thread (this, "Consumer");
        t. Start ();
    }
    Public void run ()
    {
        While (true)
        {
            q.get ();
            try
            {
                Thread. Sleep (1000);
            }
            Catch (Enception e) {}
        }
    }
}

Public class Inter Thread
{
    Public static void main (String[] args)
    {
        Q q = new Q ();
        new Producer (q);
        new Consumer (q);
    }
}
```

Link:- https://www.Youtube.Com/watch?v=A1toVMpWHh88t=4s