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LAB - 10

Demonstrate interprocess communication & deadlock

```
class Q {
int n;
boolean valueSet = false;
synchronized int get() {
while (!valueSet)
try {
System.out.println("\n Consumer waiting\n");
wait();
} catch (InterruptedException e) {
System.out.println("Interrupted Exception caught");
}
System.out.println("Got: " + n);
valueSet = false;
System.out.println("\n Intimate Producer\n");
notify();
return n;
}
synchronized void put(int n) {
while(valueSet)

try {
    System.out.println("\n Producer waiting\n");
wait();
} catch (InterruptedException e) {
System.out.println("InterruptedException caught");
}
this.n = n;
valueSet = true;
System.out.println("Put: " + n);
```

```
System.out.println("\nInterrupted Consumer\n");
notify();
}
}
class Produce implements Runnable{

Q q;
Produce(Q q){
this.q = q;

new Thread(this, "Produce").start();
}
public void run(){
int i = 0;

while(i<15){
q.put(i++);
}
}
class Consumer implements Runnable{
Q q;
Consumer(Q q){
this.q = q;
new Thread(this, "Consumer").start();
}
public void run(){
int i = 0;
while(i<15){
int r = q.get();
System.out.println("consumed"+r);
i++;
}
}
```

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```
}
class Main {

public static void main (String args[]) {
Q q = new Q();

new producer (q);
new consumer (q);

System.out.println("press Control-C to stop");
  }
}
```