

```
package SleepWait;
```

```
class GunFight {
```

```
    private int bullets = 40;
```

```
    synchronized public void fire(int bulletsToBeFired)
```

```
    {
```

```
        for (int i = 1; i <= bulletsToBeFired; i++) {
```

```
            if (bullets == 0) {
```

```
                System.out.println(i - 1
```

```
                    + " bullets fired and "
```

```
                    + bullets + " remains");
```

```
                System.out.println(
```

```
                    "Invoking the wait() method");
```

```
                try {
```

```
                    wait();
```

```
                }
```

```
                catch (InterruptedException e) {
```

```
                    e.printStackTrace();
```

```
                }
```

```
                System.out.println(
```

```
                    "Continuing the fire after reloading");
```

```
            }
```

```
        bullets--;  
    }  
    System.out.println(  
        "The firing process is complete");  
}
```

```
synchronized public void reload()  
{  
    System.out.println(  
        "Reloading the magazine and resuming "  
        + "the thread using notify()");  
    bullets += 40;  
    notify();  
}  
}
```

```
public class Wait1 extends Thread {  
    public static void main(String[] args)  
    {
```

```
        GunFight gf = new GunFight();
```

```
        new Thread() {
```

```
        @Override public void run() { gf.fire(60); }  
    }.start();
```

```
    new Thread() {  
        @Override public void run() { gf.reload(); }  
    }.start();  
}  
}
```