



4

2



```
bool threadRunning;
```

```
bool proveFermatsLastTheorem() // Thread 1 {
```

```
    threadRunning = true;
```

```
    while (true) {
```

```
        if (pow (x, n) + pow (y, n) == pow (z, n)) {
```

```
            return false;
```

```
        }
```

```
        ++n
```

```
    }
```

```
    return true;
```

```
}
```

```
void testTheorem () {
```

```
    bool result;
```

```
    startThread ([] () (result = proveFermatsLastTheorem));
```

```
    Sleep (2000);
```

```
    threadRunning = false;
```

```
    std::cout << result << std::endl;
```

```
}
```



This is real loop condition

```
while (true) {  
    // ...  
    if (condition) break;  
}
```



```

bool threadRunning;

bool proveFermatsLastTheorem() // Thread 1 {
    threadRunning = true;
    while (true) {
        if (pow (x, n) + pow (y, n) == pow (z, n)) {
            return false;
        }
        ++n
    }

    return true;
}

void testTheorem () {
    bool result;
    startThread ([] () (result = proveFermatsLastTheorem));
    Sleep (2000);
    threadRunning = false;
    std::cout << result << std::endl;
}

```

This is real loop condition


```

bool threadRunning;

bool proveFermatsLastTheorem() // Thread 1 {
    threadRunning = true;
    while (pow (x, n) + pow (y, n) != pow (z, n)) ++n;

    return false;
    return true;
}

void testTheorem () {
    bool result;
    startThread ([] () (result = proveFermatsLastTheorem));
    Sleep (2000);
    threadRunning = false;
    std::cout << result << std::endl;
}

```