

```
1 // This is example code occuring RACE CONDITION.
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4
5 #include <stdio.h>
6 #include <thread>
7
8
9 #define NUM_THREADS 5
10
11 static int threadData[NUM_THREADS];
12 int g;
13
14
15 void func_mycounter(int id) {
16     int i;
17     printf("\n thread[%d]--start", id);
18     for (int i=0;i < 1e9;i++){
19         g = g + 1 ;
20     }
21     printf("\n\t\t\t thread[%d]--finish", id);
22 }
23
24 int main(void) {
25     std::thread threadId[NUM_THREADS];
26     printf("\n-----MULTITHREAD-----");
27     g = 0;
28     printf("\n start g = %d", g);
29
30     for (int i = 0; i < NUM_THREADS; i++) {
31         threadId[i] = std::thread(func_mycounter, i);
32     }
33
34     for (int i = 0; i < NUM_THREADS; i++){
35         threadId[i].join();
36     }
37
38     printf("\n finish g = %d", g);
39
40
41     printf("\n-----SINGLE THREAD-----");
42     g = 0;
43     printf("\n start g = %d", g);
44     for (int i = 0; i < 5; i++) {
45         func_mycounter(i);
46     }
47     printf("\n finish g = %d", g);
48
49     getchar();
50     return 0;
51 }
```