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**Lab Report**

**Summary:**

**3.2:**

1. The two threads increment args a million times each. Hence the value of ‘shared’ should be ‘2000000’. So the expected output is:

After both threads are done executing, `shared` = 2000000

1. The output on running the program is:

After both threads are done executing, `shared` = 1023748

1. The two threads were trying to access the same resource at the same time, hence causing one resource to hold and the other to wait while iterating a million times. The reason it is not 2 million but around 1 million is because, there is about a 50/50 chance of one thread getting access to the variable and the other waiting. Hence, only half of the iterations actually increment the ‘shared’ value.

**3.3:**