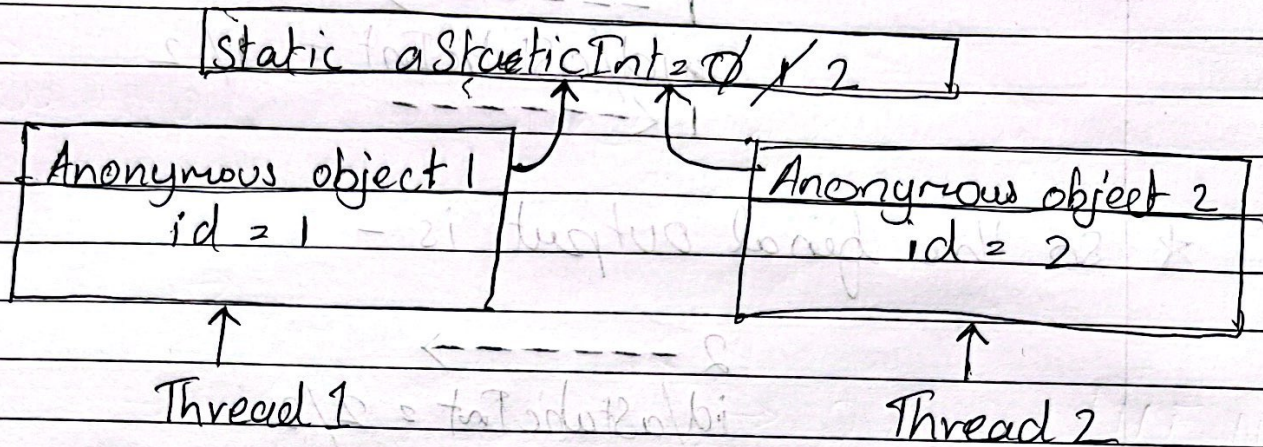


Homework 11.2



(i)

- In line 18, we first create the first anonymous object 1 i.e. "Thread 1".
- We go into the constructor where we initialize $id = 1$ and $aStaticInt = 1$.
- Since $id = 1$, therefore, we create anonymous object 2 i.e. "Thread 2".
- We again go into the constructor again and initialize $id = 2$ and $aStaticInt = 2$.
- In line 10, we have called the `run()` method on the "Thread 2" so the scheduler first completes the execution of `run` method for "Thread 2".
- Within the `run` method -
$$\begin{array}{l} 2 \text{ -----} \rightarrow \\ id/aStaticInt = 2/2 \\ 2 \text{ <-----} \end{array}$$
- After the complete execution of `run` method, we execute the `start()` method on "Thread 1".
- Since ~~the~~ there are no other threads that need to be executed within the main thread, the scheduler will execute the `start` method on "Thread 1" completely.

→ Within the run method for "Thread 1" -

1 -----→
 id/aStaticInt = 1/2
 1 <-----

★ So the final output is - 1 = 1

2 -----→
 id/aStaticInt = 2/2
 2 <-----

1 -----→
 id/aStaticInt = 1/2
 1 <-----

② Possible Output #?

1 -----→
 id/aStaticInt = 1/2
 2 -----→
 id/aStaticInt = 2/2
 2 <-----
 1 <-----

No, this cannot be a possible output of this program because this output suggests that "Thread 1" starts executing before the complete creation of anonymous object 1 which cannot be the case. The scheduler first always first executes the run() method of "Thread 2" because the method call is done within the constructor of "Thread 1". After the complete creation of anonymous object 1, start() method is executed on "Thread 1".