HW 11.2

O/P

2 ⟶
id / aStaticInt = 2 / 2
2 ⟵
1 ⟶
id / aStaticInt = 1 / 2
1 ⟵

1
2
3
4
5
6

- When line 18 is executed, we goto the constructor as object is getting created and as well as telling the scheduler that the new thread object is ready to run.

Right now only 2 threads are present main thread and one created in line 18. We pass id as 1.

We enter the if block as id == 1, and create another object and pass value 2 as id and tell it to run. run tells us this thread will just work like a method call and finish its work and then terminate.
The static int variable now holds 2 as its value.

When run is executed it will print o/p line 1 - 3, Once its execution is done, thread one will continue and

access run method with id as 1 and aStaticInt as 2 because it was modified by object creation at line 10. It will terminate after line 15 is executed.

The scheduler here starts with main thread, lets it run, executes line 18, where scheduler tells main thread to wait and starts running the new thread created. It will tell this thread to wait when line 10 is executed because the new thread created has run, which makes the scheduler run it till termination. Once this thread is terminated thread one is told to run again and will run to termination

No the o/p is not possible due to the reasons given above