

CS 5334 Spring 2016  
Shirley Moore, Instructor  
In-class Group Activity  
February 2

Name(s) \_\_\_\_\_  
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### **Dining Philosophers Problem**

Read the description of the Dining Philosophers problem at <https://msdn.microsoft.com/en-us/magazine/dd882512.aspx> . Carry out the following activities and answer the questions below about the provided DiningPhilosophers.java code.

1. Compile and run the program. What do you observe? Explain your observations as to why they occur.
2. Change the number of philosophers -- e.g., to 8. What do you observe?
3. Design a solution to the Dining Philosopher's Problem that prevents deadlock and starvation and explain your solution as to why it works.
4. Change the program so that deadlock and starvation are prevented.