1. Announcements:
   (a) We’ll start to make use of the resources from the text. Assuming you’re 22xyz3, you can clone these from
   
   ssh://22xyz3@lohani.cs.williams.edu/~bailey/js.git
   
   into your cs136 directory. There are instructions (INSTALL.txt) in the repository for telling Java about these classes.
   
   (b) We’ll be doing a lab related to the Silver Dollar Game (see text).
   
   (c) Questions?

2. Carefully designing a useful, random Die.
   (a) Constructor forms.
   (b) Mutators and accessors.
   (c) Instance variables vs. global variables.
   (d) Hiding instance variables: protected vs private.
   (e) Controlled independent randomness.
      i. Key: System.currentTimeMillis(). A constantly changing integer.
      ii. Attempt: Every die gets a dedicated generator.
      iii. Attempt: Allow rolls of the dice to replay.
      iv. Attempt: Dice share generators.

3. Vectors. Analysis of an existing class.
   (a) Found in js/src/structure/Vector.java.
   (b) Abstract concept: the extensible array; grows and shrinks as needed.
   (c) Rough sketch (try: javap structure.Vector):
      i. Based on storing Object types; requires casting when we access a value in the Vector.
      ii. Uses methods get/set/add, not square-bracket indexing.
      iii. Is extended with add (two arguments) and remove.
      iv. Utility methods: isEmpty and size (only String and arrays use length).
      v. Extensibility:
         A. Internally, we manually keep track of size (elementCount), capacity (array length)
         B. Double array length when necessary.
   (d) Performance analysis on Wednesday.