Intro to Data Structures

Lecture #3 – Random Numbers &
Problem Solving
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Outline for Today

- Strings (and looking at the Java API)
- Random numbers
- Loops, Conditionals (by example)
  - PiDemo.java

Random numbers

- Math.random()
  - returns a "random" double in [0,1)
  - that is, between 0 and 0.99999…

- Generate an int between 0 to 9?
  - (int)(Math.random() * 10) // parens are important!
- Generate a dice value (1 to 6)?
  - (int)(Math.random() * 6) + 1

Problem solving (a guided exercise)

Suppose you're on a desert island (or a desert peninsula) and you've got some time on your hands. Since it's Qatar, you've also got a bunch of pearls. And since you're a geek, you now have everything you need to calculate PI…