

CSE 12 – Basic Data Structures and Object-Oriented Design

Lecture 24

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Announcements

- Quiz 24 due Wednesday @ 8am
- Survey 10 due Friday @ 11:59pm
- PA8 due Thursday @ 11:59pm
 - No resubmission
- PA7 Resubmission due Friday @ 11:59pm
- Final Exam
 - Starts Saturday, March 13th @ 8:00am
 - Ends Monday, March 15th @ 11:59pm
 - 3 hour exam – clock starts when you open exam
 - Must be finished in one sitting

Topics

- Iterators
- Questions on Lecture 24?

MemoryStream – use in Enhanced For Loop

- How could we make our MemoryStream work in an enhanced for loop?

```
MemoryStream<Integer> stream = new MemoryStream<Integer>();  
//add data to stream  
for (Integer i: stream) {  
    System.out.println(i);  
}  
stream.close();
```

Other Iterators

- How would we make a BST iterator?
- What about a Heap iterator?

Random Stream

- How could we make our random stream so that we can get random numbers in an enhanced for loop?
- Random random;
- **public int nextInt(int bound)**
 - Returns a pseudorandom, uniformly distributed int value between 0 (inclusive) and the specified value (exclusive), drawn from this random number generator's sequence.
- public RandomStream(int size, int bound) { }

```
RandomStream r = new RandomStream(10, 100);  
for (Integer i : r) {  
    System.out.println(i);  
}
```

Questions on Lecture 24?