

Arrays Lecture Clicker Answers

Clicker Question 1

Which of the following is the correct way to declare and initialize an array of ints named greenEggs, of size 5?

- A. `int greenEggs = new array(5);`
- B. `int[] greenEggs = new array(5);`
- C. `int[] greenEggs = new int[5];`
- D. `int[5] greenEggs = new int[];`

Clicker Question 2

Consider the sum function from slide 22:

```
public int sum (int[] numbers){  
    int total = 0;  
    for (int i=0; i < numbers.length; i++){  
        total += numbers[i];  
    }  
    return total;  
}
```

What if the code read `i <= numbers.length`?

- A. It would wrap around and add the value at index 0 again
- B. It would reach the last element of the array
- C. It would raise an `IndexOutOfBoundsException`

A: The last index accessible in numbers is `numbers.length - 1`, so you would get an off-by-one error

Clicker Question 3

If we want to access the third row, sixth column slot on a chessboard, with column-major order, which indices would we need to supply?

- A. `chessboard[3][6]`
- B. `chessboard[6][3]`
- C. `chessboard[2][5]`
- D. `chessboard[5][2]`

A: Remember that array indices start at 0. "Column-major" means you index by col, row.

Clicker Question 4

Which of the following uses an `ArrayList` correctly?

- A. `ArrayList<String> seussQuotes = new ArrayList<String>();`
`String x = seussQuotes.get(1);`
- B. `ArrayList<ElementType> seussQuotes = new ArrayList;`

```
String x = seussQuotes[0];  
C. ArrayList<Strings> seussQuotes = new ArrayList<ElementType>();  
String x = seussQuotes.first();  
D. ArrayList<String> seussQuotes = new ArrayList<String>;  
String x = seussQuotes.get(0);
```