Answers 3

```
Legend:
Only in Java: 👙
Only in Python: 🛟
In both Java and Python: 🁙 🖰
```

1. \leq Create an array of five strings of your choice.

Possible answers:

```
1 String[] myStrings = {"Alpha", "Beta", "Gamma", "Delta", "Epsilon"};

1 myStrings = ["Alpha", "Beta", "Gamma", "Delta", "Epsilon"]
```

2. \(\le \) Create an array of 100 integers with value 0.

```
1 int[] nums = new int[100];
```

- 3. Given the array int[] nums = {3, 1, 4, 1, 5, 9};:
- a) What integer is at index 3?

Answer: 1 (the second 1 in the array)

b) How many elements are in the array?

Answer: 6

c) 🐓 Write code to print the value at index 3.

```
1 System.out.println(nums[3]);
```

d) <u>§</u> Write code to print the size of the array.

```
1 System.out.println(nums.length);
```

4. Given the following multidimensional array representing a simplified chess board:

```
String[][] board = {
    // Col 1    Col 2    Col 3
    {"Knight B", "King B", "Knight B"}, // Row 1
    {"Pawn B", "Pawn B", "Pawn B"}, // Row 2 ...
    {"", "", ""},
    {"Pawn W", "Pawn W", "Pawn W"},
    {"Knight W", "King W", "Knight W"} // Row 5
};
```

 \mathcal{L} Write code to get the piece at row 4, column 2.

```
1 String piece = board[3][1];
```

5. Given the following strings:

1 fifth = secret_message[4]

```
§ String secretMessage = "asdfghjkl";

e secret_message = "asdfghjkl"
```

Write code to get the fifth character in each.



```
char fifth = secretMessage.charAt(4);
```

```
6. Print the following text exactly using only one print statement (do not include line numbers).
```

```
Linus's Law:
    "given enough eyeballs, all bugs are shallow"
    - Eric S. Raymond

print("Linus\'s Law:\n\"given enough eyeballs, all bugs are shallow\"\n- Eric S. Raymond")
```

7. \(\le \) Write a function that has two integer parameters and returns the sum of the two integers.

```
private static int sumTwo(int num1, int num2) {
    return num1 + num2;
}
```

8. What is wrong with the following function?

Answer: The return type is void meaning that the function should not return anything. However, its definition returns a boolean value.

9. (No correct answer) Do you understand how to use classes and objects?

If so, great! Otherwise, that's okay; it's a complicated topic.