

Lab #8: Implementing an inputArray and a printArray function

Write a program that declares an array of 10 4-byte integers, starting at label Array, and needs to be completed. It first calls a function called inputArray, and then calls a function called printArray. inputArray takes two arguments, an address and a number, say n , and queries the user for n 4-byte signed numbers which are stored one after the other starting at the address passed in as the first argument. The program then calls printArray, which takes the same arguments as inputArray and prints a comma-separated list of all the integers. Here is an example interaction with the program, with user input in bold:

```
Enter an integer: 12
Enter an integer: 6
Enter an integer: -3
Enter an integer: 5
Enter an integer: 6
Enter an integer: 13
Enter an integer: 14
Enter an integer: 14
Enter an integer: 201
Enter an integer: -32
List: 12, 6, -3, 5, 6, 13, 14, 14, 201, -32
```

Implementing and using a findValue function

Add a new function called findValue. findValue takes three arguments. The first two arguments are an address and a number, say n . The third argument is a 4-byte signed integer value. findValue goes through 4-byte values starting at the address passed in the first argument, going through at most n values. If the value passed as the third argument is found, then findValue returns the address of that 4-byte value. If it is not found, then findValue returns 0. If n is equal to 0, then findValue does nothing and returns 0. Modify your function inputArray so that it calls findValue to check whether a value was entered previously. If so, then inputArray should prompt the user for a new value until a non previously seen value is entered. Here is an example interaction with the program, with user input in bold:

```
Enter an integer: 12
Enter an integer: 6
Enter an integer: -3
Enter an integer: 5
Enter an integer: 6
Value already entered, try again!
Enter an integer: -33
Enter an integer: 13
Enter an integer: 14
Enter an integer: 14
Value already entered, try again!
Enter an integer: 57
Enter an integer: 201
Enter an integer: -32
List: 12, 6, -3, 5, -33, 13, 14, 57, 201, -32
```