
Arrays and Functions

11/9/11

CS150 Introduction to Computer Science 1

1

Arrays as Function Arguments

- You can pass an array as an argument to a function

```
void printIntArray(int arr[], int size);

int main()
{
    const int SIZE = 7;
    int values[] = {5, 6, 0, 1, 2, 3, 4};

    printIntArray(values, SIZE);
    return EXIT_SUCCESS;
}
```

Array Name

2

Arrays as Function Arguments

```
void printIntArray(int arr[], int size)
{
    for(int i = 0; i < size; i++)
    {
        cout << arr[i] << endl;
    }
}
```

3

Passing Single Array Elements

- Passing single array elements is like passing in a single variable

```
void showValue(int num);

int main()
{
    int values[] = {5, 6, 0, 1, 2, 3, 4};
    const int SIZE = 7;
    for(int i = 0; i < SIZE; i++)
    {
        showValue(values[i]);
    }
    return EXIT_SUCCESS;
}
```

4

Passing Arrays into Functions

- Arrays are always passed by reference

- What does this mean?

5

Practice

- Write a function that will accept an integer array and a size for that array, and return the sum of all the elements in the array

- `int sumArray(int array[], int size);`

6

Practice

- Write a function that will accept an integer array and a size for that array and return the highest value in the array

- `int getHighest(int array[], int size);`

7

Program

- Write a program that will allow a professor to enter up to 20 homework scores. The program must then calculate and display the average after dropping the lowest score. You must use the following functions:

8
