

# CS 161, Lecture 22: Exam II Review – 5 March 2018

# Week 6

- What symbol is used to signify that a parameter is a reference parameter?
- Call-by-reference parameters are passed
  - a) nothing
  - b) the actual argument.
  - c) the value in the actual argument.
  - d) the address of the argument.
- If you need a function to get both the number of items and the cost per item from a user, which would be a good function declaration to use?
  - a) `int,float getData();`
  - b) `int getData(float cost);`
  - c) `void getData(int count, float cost);`
  - d) `void getData(int& count, float& cost);`

# Week 6 Continued

- True or False: If p1 and p2 are both pointers that point to integers in memory, the condition `p1==p2` will be true if the values that are in those memory locations are the same.
- Even though pointers point to addresses which are integers, you can not assign an integer to a pointer variable.
- Declare a pointer variable named ptr to an integer. \_\_\_\_\_

# Week 6 Continued

- In the statement `cout << *p1;`, the `*` is called the \_\_\_\_\_
- What is the output of the following code fragment?

```
int v1=2, v2=-1, *p1, *p2;
```

```
p1 = & v1;
```

```
p2= & v2;
```

```
p2=p1;
```

```
cout << *p2 << endl;
```

- a) 2
- b) -1
- c) -2
- d) 1

# Week 6 Continued

- What is wrong with the following code?

```
int fact(int n) {  
    return n * fact(n-1);  
}  
fact(4);
```

- a) The function is name wrong
- b) There is not a base case to stop the function from running
- c) The function will never execute
- d) Nothing

# Week 7

- In which case would you consider using a dynamic array?
  - If the array is small, and the size is known before the program runs.
  - If the program needs to get the size of the array from the user
  - If the array size is big, but known at compile time
  - You should always use a dynamic array
- Which of the following correctly declares a dynamic array of strings?
  - a) `p1 = new string(13);`
  - b) `p1 = new string[];`
  - c) `p1 = new string[13];`
  - d) `p1 = new stringArray(13);`

# Week 7 Continued

- Write the code to declare a two dimension array of integers with 10 rows and 20 columns.
- Given an array named scores with 25 elements, what is the correct way to access the 25<sup>th</sup> element?
  - a) scores+25
  - b) scores[24]
  - c) scores[25]
  - d) scores[last]

# Week 7 Continued

- Which of the following function declarations will accept the following two-dimension array?

```
int pages[10][30];
```

- a) void f1(int pages[][], int size);
- b) void f1(int pages[][30], int size);
- c) void f1(int pages[10][], int size);
- d) void f1(int& pages, int size);

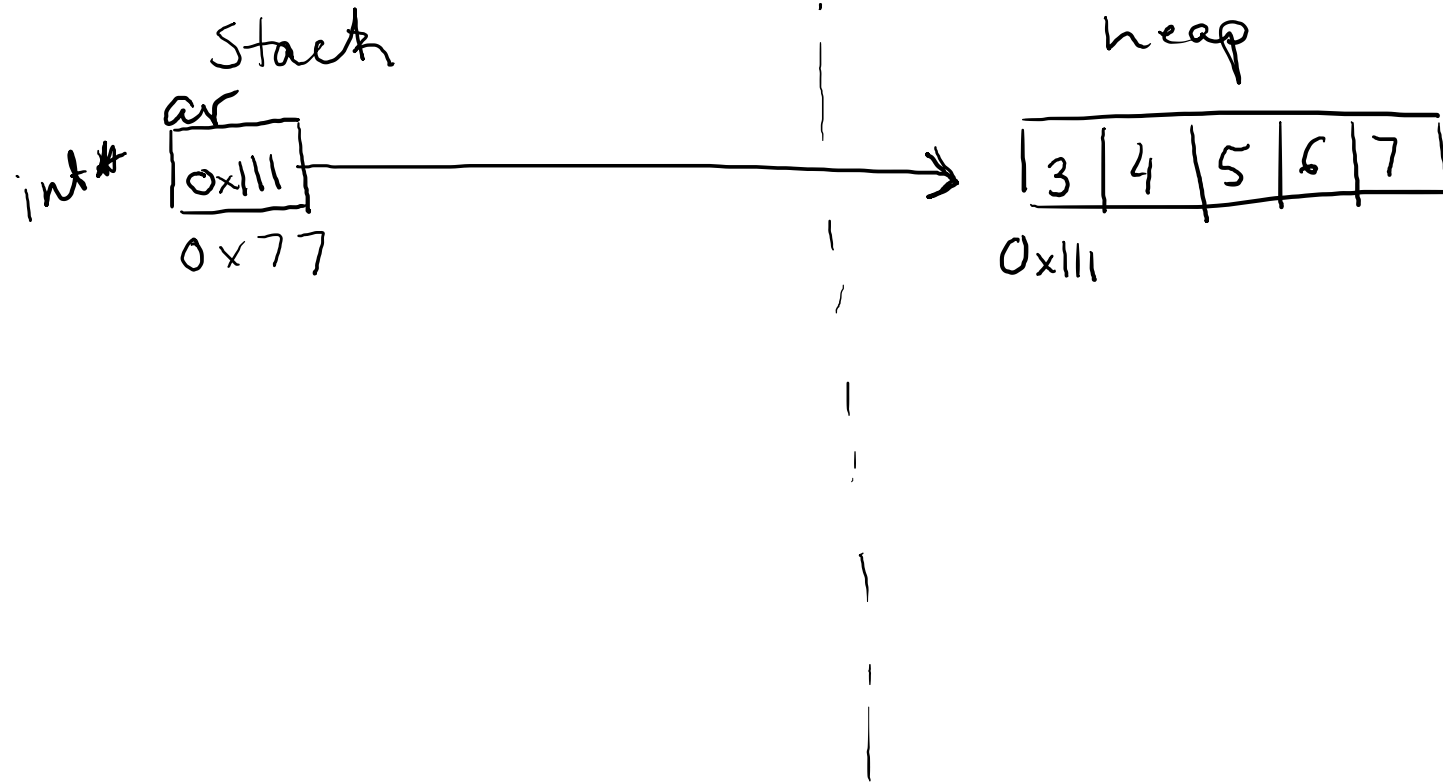


# Week 7 Continued

- Which of the following will read values from the keyboard into the array? (Assume the size of the array is SIZE).
  - a) `cin >> array;`
  - b) `cin >> array[];`
  - c) `cin >> array[SIZE];`
  - d) `for(i=0;i<SIZE;i++)`  
`cin >> array[i];`

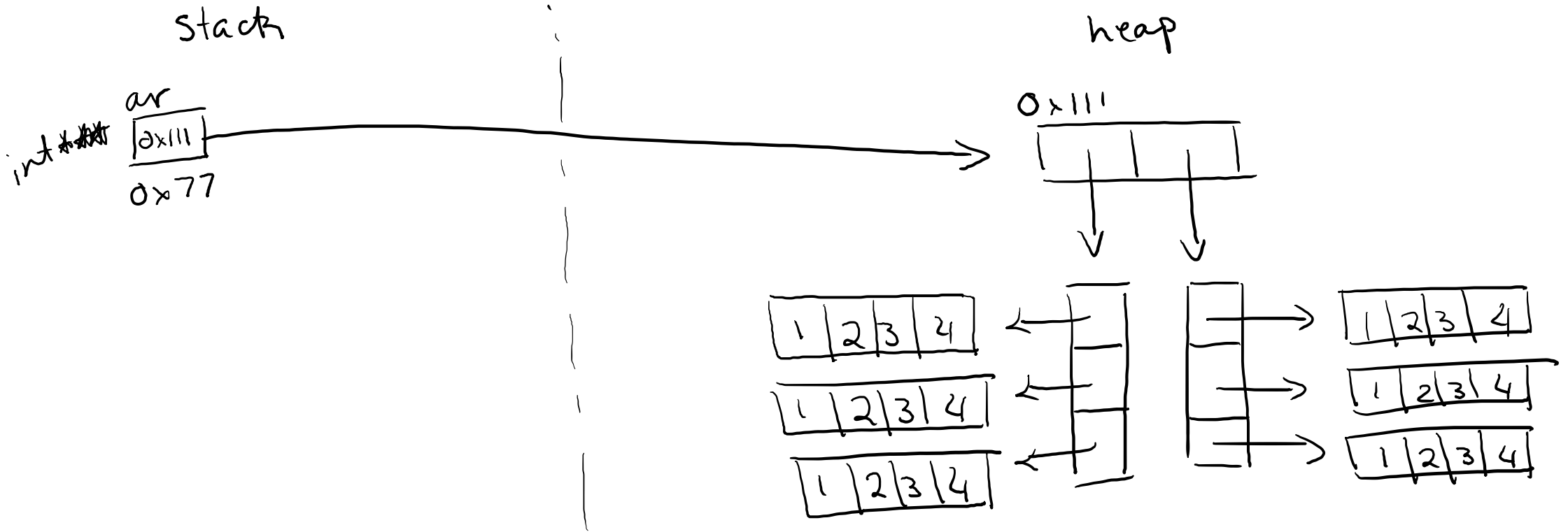
# Week 8

- Write the code which matches the following picture.



# Week 8 Continued

- Write the code which matches the following picture.



# Week 8 Continued

- What are command line arguments?
- What is the difference between C-strings and C++ strings?

