

## Turn in Homework 3

## Variable Scope

CSCI 10 - Santa Clara University - Fall 2016  
Michael J. Bannister

## Announcements

- First CS event tomorrow (check your email)
- Midterm will be graded by the end of today!
- Homework 2 will be handed back Friday
- Midterm solutions will be posted today

## Scope

In computer programming, the scope of a **name binding**, such as a variable, is the part of a computer program where the binding is **valid**: where the name can be used to **refer** to the **entity**

## Example 14

- Variables declared in a function are **local** to that functions.
- A function only has access to outside variables if they are passed in as parameters.

## Example 15

- We can place variables in global scope, allowing them to be manipulated by all functions, but doing so is generally discouraged.

## Example 16

- By default functions in C++ are call-by-value, meaning that a variable only gives a copy of its value to a function

## Example 17

- Within a a function we can declare variables which are local to a **block** of code. You can think of a block as something wrapped in {...}.