CMSC 106  
Lecture Set #8

Set Started:  
Tuesday, October 16, 2007

Parameter Passing Details

- Parameters must match in position and type
  - except automatic promotion is allowed
  - if there is a mismatch – compilation error
- void f1(float x, y);
  - y is an integer type parameter by default
  - bad style
- All arguments are passed by value

Introduction to Scope

- local variables
  - are declared within a pair of curly braces
  - are only available from the time they are declared until the end of those curly braces
- parameters
  - are initialized by their corresponding argument (get a copy of that value)
  - are only available in the function for which they are a parameter
Random Number Generation

- provided in <stdlib.h>
  - function: `rand`
  - function: `srand`
  - constant: `RAND_MAX`
  - terminology: random, pseudorandom, seed
- function provided in <time.h>
  - `time`

Character input and output

- in <stdio.h>
  - function: `getchar`
  - function: `putchar`
  - constant: `EOF`
- Using them in Loops
- The Call Stack

Function Philosophy

- Modularity
- Encapsulation
- Reusability
- Modifiability