Last Time

- We
  - Learned about passing arguments by value and by reference
- Today we will
  - Look at more function examples and talk about scope

Scope

- Variables have scope - places in the program where they can be referenced
- Local scope - valid only in function or main program
- Global scope - valid anywhere in program
- We will use local variables most of the time

Example

```c++
void computeSum(int num1, int num2)
{
    int sum;
    sum = num1 + num2;
    return sum;
}
```

Example

```c++
int computeSum(int, int);
void main()
{
    int i, j;
    cin >> i >> j;
    computeSum(i, j);
    cout << sum << endl;
}
```

Example

```c++
int computeSum(int, int);
void main()
{
    int num1, num2;
    cin >> num1 >> num2;
    sum = computeSum(num1, num2);
    cout << sum << endl;
}
```
Example

```c
void silly(float);
void main()
{
    float x, y;
    x = 23;
    y = 5;
    silly(x);
    cout << x << y << endl;
}
void silly(float x)
{
    float y;
    y = 25.0;
    x = y;
}
```

Summary

- In today’s lecture we covered
  - More function examples
  - Scope
- Readings
  - P. 170 - 180