

## 6-1 Functions

There are more efficient ways to this, but these are simple examples of functions.

**This calls a function that will print your name, major and school 3 times.**

```
// Name: John Smith
// This program uses a function
#include <iostream>
using namespace std;
void displayMessage();
int main()
{
    cout << "Hello from main.\n";
    displayMessage();    // Call displayMessage
    displayMessage();
    displayMessage();
    return 0;
}
void displayMessage()
{
    cout << endl;
    cout<< "My name is John Smith"<<endl;
    cout<<"My major is Computer Science"<<endl;
    cout<<"I attend Southern University"<<endl;
    cout<<endl;
}
```

Filename: ca6-1a.cpp

Using the program above as a guide, use your name instead of John Smith, and add your high school and home town, and call the function 5 times in stead of 3.

```
// Name: John Smith
// This program uses a function
#include <iostream>
using namespace std;
void show(int num);
int main()
{
    int x, y;
    x = 7;
    y = 2;
    show(3);
}
```

```
    show(x);
    show(y);
    return 0;
}
void show(int a)
{   int a2, a3;
    a2 = a * 2;
    a3 = a * 3;
    cout << a<<" doubled is "<<a2<<" tripled is " <<a3<<endl;
}
```

Filename: ca6-1b.cpp

Using the above program as a guide, write a function that will double a number, multiply it 5 , and then by 10 and print them out. Your program should call the function 3 times with 3 different values.