

1. (Savitch, programming project 4 at the end of chapter 7)

You operate several hot dog stands distributed throughout the town. Define a class named `HotDogStand` that has a member variable for the hot dog stands ID number and a member variable for how many hot dogs it has sold that day. Create a constructor that allows a user of the class to initialise both values. Also include a member function named `justSold()` that increments the number of hot dogs the stand has sold by one. This function will be invoked each time the stand sells a hot dog so that you can track the total number of hot dogs sold by the stand. Add another function that returns the number of hot dogs sold. Finally, add a static data member that tracks the total number of hot dogs sold by ALL hot dog stands, and a static function that returns the value in this variable.

Write a main function to test your class with at least 3 hot dog stands.

2. Why do the two loops below output the same values? Which is better `++i` or `i++`? Why?

```
#include <iostream>

using namespace std;

int main()
{
    for(int i = 0; i < 10; i++) {
        cout << i << endl;
    }

    cout << endl;

    for(int i = 0; i < 10; ++i) {
        cout << i << endl;
    }
}
```