### Loops

#### section 5.7

# Running totals (5.7)

- Write a snippet of code that will calculate the sum of all the integers from 0 to 5.
- Write a snippet of code that will ask the user for a number. Print the *sum* of all the integers from 0 to the number the user supplied.

# Example

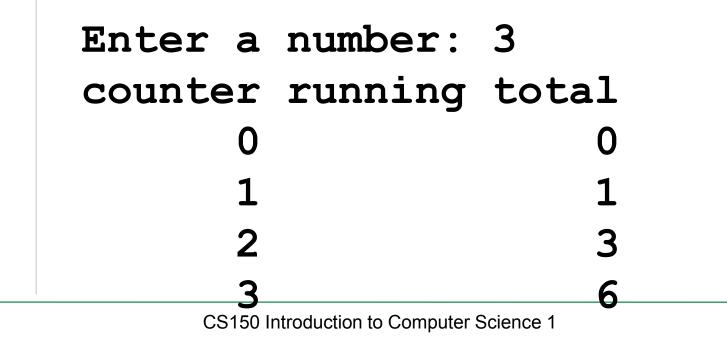
```
• How many inches of rain did we get last week?
const int DAYS IN A WEEK = 7;
int currentDay = 1;
                              // initialize the counter
double totalRain = 0.0;
                                 // initialize the total
double currentRain;
// loop for each day in a week
while (currentDay <= DAYS IN A WEEK) // test the counter
{
 cout << "How much rain fell on day " << currentDay << ": ";
 cin >> currentRain;
 totalRain += currentRain;
 currentDay ++;
                                  // update the counter
}
cout << "The total rainfall last week was ";
cout << fixed << setprecision(2) << totalRain;</pre>
```

### Practice

 Write a snippet of code that will ask the user for a number. Print the sum of all the even numbers from 0 to the square of the number the user supplied.

## Practice

 Write a snippet of code that will ask the user for an integer. Print all the integers from 0 to the number the user supplied as well as the running total of the integers.





- Write a snippet of code that will ask for a student's exam score and then print the appropriate letter grade (A,B,C,D,F).
- Continue asking for exam scores and printing letter grades until the user enters a negative exam score

double examScore;