
Let's Review (Revise)

09/20/04

CS150 Introduction to Computer Science 1

1

Last Time

- We
 - Learnt about nested if/else selection structures
 - Were introduced to the while repetition structure
- Today we will
 - Review

09/20/04

CS150 Introduction to Computer Science 1

2

Key Ingredients of **while** loops

- Initialize
 - MUST initialize loop control variable
- Test
 - The value of the loop control variable is tested during each iteration of loop
- Update
 - Loop control variable is changed during each loop iteration

If any one of these is missing or incorrect, your loop won't run properly--not at all, too many/few times or infinitely.

09/20/04

CS150 Introduction to Computer Science 1

3

Problems

- What's the output for x = 2? 3? 5?

```
cout << "Enter an integer";
cin >> x;
product = x;
count = 0;
while (count < 4)
{
    cout << product << endl;
    product *= x;
    count += 1;
}
```

09/20/04

CS150 Introduction to Computer Science 1

4

Problem

- What's wrong? Correct the program:

```
count = 0;
while (count <= 5)
cout << "Enter data item; ";
cin >> item;
item += sum;
count += 1;
cout << count << " data items" <<
"were added" << endl;
cout << "Their sum is " << sum << endl;
```

09/20/04

CS150 Introduction to Computer Science 1

5

Problem

- Write a program that reads in 5 grades and computes their average
- Write a program that reads in an inputted number of grades and computes the average

09/20/04

CS150 Introduction to Computer Science 1

6

Summary

- In today's lecture we reviewed the material we've covered so far this semester
- Readings
 - Study for the midterm on Friday!