



Switch and more Conditionals

7-19-2006





Opening Discussion

- What did we talk about last class? What code did we write last class?
- Do you have any questions about the reading?
- Do you have any questions about the assignment?





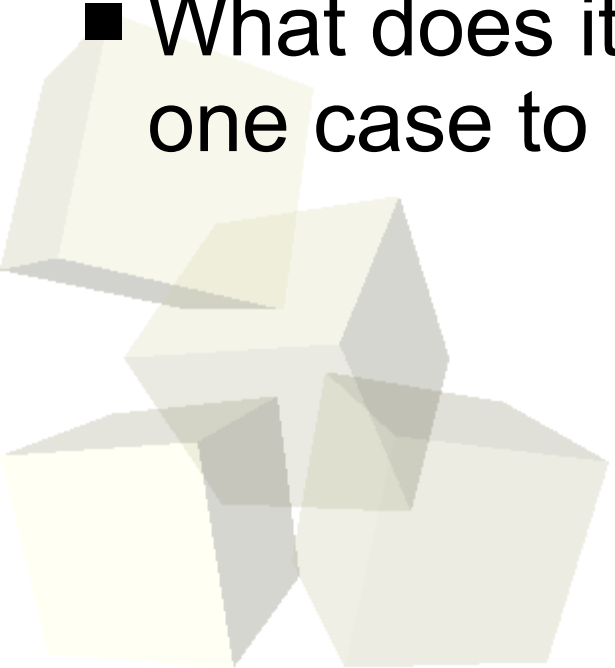
Submitting Assignments

- In order to submit your assignments to me you will be using a little program that I wrote which will also let you look at your grades in the class.
- In the lab you should run
`/users/mlewis/Local/HTML-Documents/Grades/GradeCheck.sh.`
- This is the same thing the “Grades” option on the web page will take you too, but you can't submit through an applet. Check your grades here for correctness.
- Your login name is just your normal one. Your initial password has been set to your 7 digit student number.



The switch Statement

- The if statement is capable of doing any conditional operation you want. However, it is not the only conditional statement in C.
- The switch statement exists for certain situations where you are selecting from a number of different integer values that an expression can take.
- What is the syntax of the switch statements?
- What does it mean for control to fall through from one case to another? How do you prevent this?



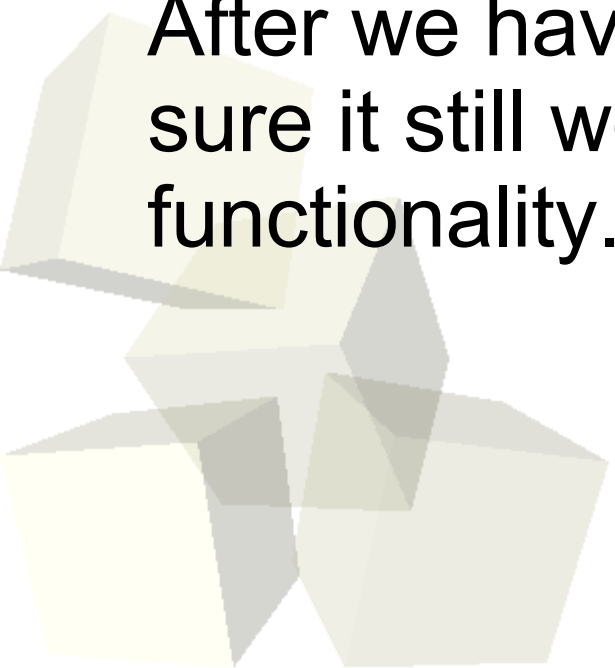


- There is nothing switch can do that if can't. The same behavior as a switch can be attained by repeatedly doing if-else clauses.
- The advantage of the switch statement is brevity. You will find that switch isn't used all that often, but that when it is used it is typically a fair bit shorter than the corresponding code using if statements.
- The switch statements can be nice for selecting between menu options in an interactive program if the menu options are either integers or characters.



Adding Options

- Let's go into our ray tracing code now and add a menu so that the user can pick to intersect a ray with either a sphere or a plane.
- This might motivate us to break things up into functions a bit differently. Remember that when we go to refactor our code we should change the code structure without altering the functionality. After we have changed the structure and made sure it still works we can add in the new functionality.





- There are actually some instances where switch could be more efficient than an if statement. How might that be?
- Remember that assignment #2 is due on Thursday.

