

Switch Statements

- Another form of selection statement
- Similar to if's
- · Useful for lots of alternatives

Example char choice; cout << "Enter A, B, or C: ";</pre> cin >> choice; switch (choice) ł case 'A': cout << "You entered A" << endl;</pre> break; case 'B': cout << "You entered B" << endl;</pre> break; case 'C': cout << "You entered C" << endl;</pre> break; default: cout << "You did not enter A, B, or C!" << endl;</pre> } CS150 Introduction to Computer Science 1 3

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Form	
switch (selector)	
{	
<pre>case label1: statements1;</pre>	
break;	
<pre>case label2: statements2;</pre>	
break;	
<pre>case labeln: statementsn;</pre>	
break;	
<pre>default: statements;</pre>	
}	
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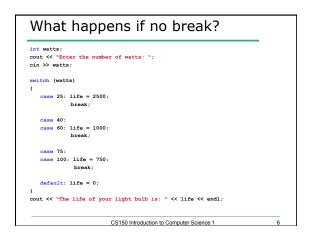


Important!

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- Selector must be a constant integral expression
- Each possible value is a separate case
- break stops statements for case, otherwise continue with statements for next case

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```
What is the Output?
switch (color)
{
    case `R':
    case `r': cout << "red" << endl;
    case `B':
    case `b': cout << "blue" << endl;
    case `Y':
    case `y':
    case `y': cout << "yellow" << endl;
}
What happens when color is 'r'? 'B'? 'Y'? 'K'?
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```



Example	
<pre>int x, y; cout << "Enter two numbers: "; cin >> x >> y; switch (x > y)</pre>	
{	
<pre>case 1: cout << "x greater\n";</pre>	
<pre>case 0: cout << "y greater or equal\n";</pre>	
}	
Write this as an if statement.	
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Questions

- Can you write any switch statement as an if? Why or why not?
- Can you write any if statement as a switch? Why or why not?

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Examples

 Write an if statement that prints out the level of schooling based on a grade level. If the input is 0, then output none. (1 through 6, elementary; 7 through 8, middle school; 9 through 12, high school; > 12, college)

• Write a switch statement to do the same

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