

# Practice with Loops

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*Lecture 5*

# Outline

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- Additions to yesterday's lecture:
  - `cin` or `cin >> variable` can be used as a loop/if condition
    - Equivalent to `!cin.fail()`
  - Lecture slides include a loop control example
- Introduction to Visual Studio Express
- Minilab

# Introduction to Visual Studio

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- Creating a new project
- Adding a new or existing source (C++) file
- Compiling and running code

# Minilab

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- Lab 1
  - Write a program that simulates a restaurant.
    - Your program should print out a menu and take a customer's order, then print out their total bill for the items ordered, including sales tax (11%) and gratuity (18%).
- Lab 2
  - Write a program that asks the user to input a positive integer and factors it into its prime factors.
- Lab 3
  - Write a program for two players to play Nim.
    - Nim starts with 21 stones
    - Players take turns removing 1-3 stones until all are gone
    - The player who does not take the last stone wins
- You may want to come up with a plan or flowchart before you start coding