Excel Macros and Visual Basic for Applications (VBA)
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Disclaimer: This is a “quick & dirty” overview. The capabilities of Excel/VBA go far beyond what is shown here.

Background
Excel provides the ability to record macros. At the simplest level, a macro is simply the memorization of a series of steps. However, Excel actually uses a programming language called Visual Basic for Applications (VBA) as the medium for recording macros. Microsoft Word and Access also use VBA as their "macro language." VBA is really a full-featured, modern programming language (an object-oriented language). It is tied very closely with Microsoft's "stand-alone" programming language, Visual Basic (VB).

VBA can be thought of as the "glue" holding the Microsoft applications together. One can actually write a VB/VBA program which integrates the features of the major Office applications. For example, a VB program could query an Access database for current data on supplies, demands, and transportation costs. Then the information could be sent to Excel where an optimization routine determines an optimal shipping/routing pattern. Finally, results could be sent to Word where a custom report is generated.

As an aside, Microsoft is licensing VBA to other software developers who are including it in their packages. This extends VBs "tentacles" into many high-power Windows applications.

Different Types of Macros
Basic Automation of Excel Tasks (Recording a Macro)
  Requires zero programming.
  Example: Creating a standard title block for a spreadsheet.
  Example: Creating a scatter plot for a set of data.
  Assigning a keyboard shortcut or creating a control button for a macro.

Enhancing a Recorded Macro
  Requires limited programming.
  Example: Enhancing the title block.
  Example: Enhancing the scatter plot to allow any data to be selected for plotting.
  Example: Commenting a cell, with the cell's formula as the comment.

Extending Excel's Capabilities by Writing New Functions
  Requires programming knowledge.
  Example: Functions to compute standard forecasting error measures (MAD, MSE, MAPE).
  Example: Functions to implement common heuristics for the Traveling Salesman Problem (TSP).

Recommendations
Start by recording basic macros.
Look through the VBA code to understand the logic and structure of the language.
Make small modifications to the VBA code and re-test the macro.
Learning VBA (as with most software) is an incremental process.

For Further Information
Online VBA help (may have to go back and install this; it's not included in a "standard" installation)
VBA Programmers' Guide (Excel 97, but most of it applies to later versions):
http://www.microsoft.com/OfficeDev/Articles/OPG/
VBA Information Site: http://msdn.microsoft.com/vba/default.asp