

# **Working with Datasheet View**

# Understanding Datasheets

---

- ❑ A datasheet is similar to a spreadsheet in that it displays data as a series of rows and columns.
- ❑ Each row represents a single record, and each column represents a single field.
- ❑ Datasheet window include:
  - A scroll bar for moving between records and fields.
  - The Navigation buttons for moving between records also appear in the bottom-left of the Datasheet window.

# Moving within a datasheet

- Using the Navigation buttons



First

Previous

Record number box

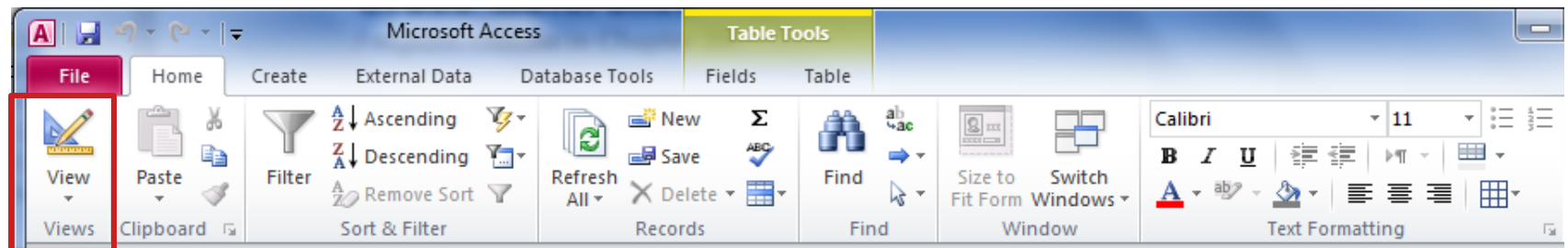
Next

New record

Last

# The Datasheet ribbon

The Datasheet ribbon provides a way to work with the datasheet:



## □ The Views group

- Use to switch between Datasheet view, PivotTable view, PivotChart view, and Design view.

# The Datasheet ribbon

---

## □ The Clipboard group:

- Contains the Cut, Copy, and Paste commands. The Paste command's down arrow gives you three choices: Paste, Paste Special, and Paste Append.
- Paste Special gives you the option of pasting the contents of the Clipboard in different formats.

# The Datasheet ribbon

---

## ❑ The Sort & Filter group

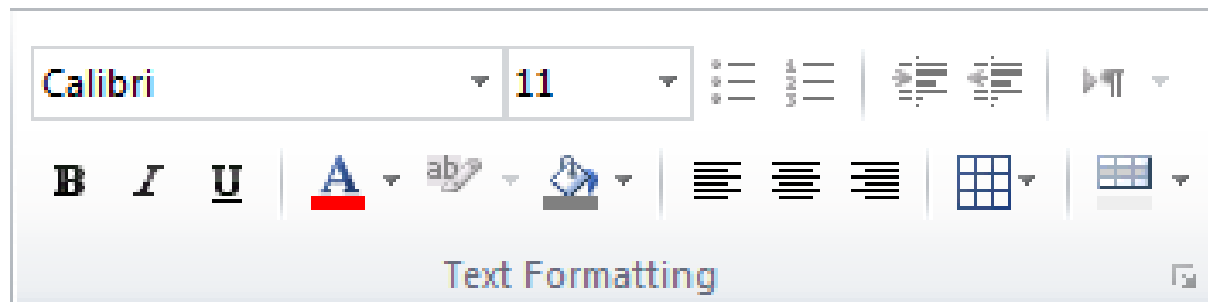
- Use to change the order of the rows as well as limit the rows being displayed — based on criteria you want.

## ❑ The Records group

- Use to save, delete, or add a new record to the datasheet.
- It also contains commands to show totals, check spelling, freeze and hide columns, and change the row height and cell width.

# Formatting the Datasheet

- Select tab Home → Text Formatting.
  - The Text Formatting group lets you change the look of text fields in the datasheet.
  - Use these commands to change the font, size, bold, italic, color, and so on.



# Rearranging Columns

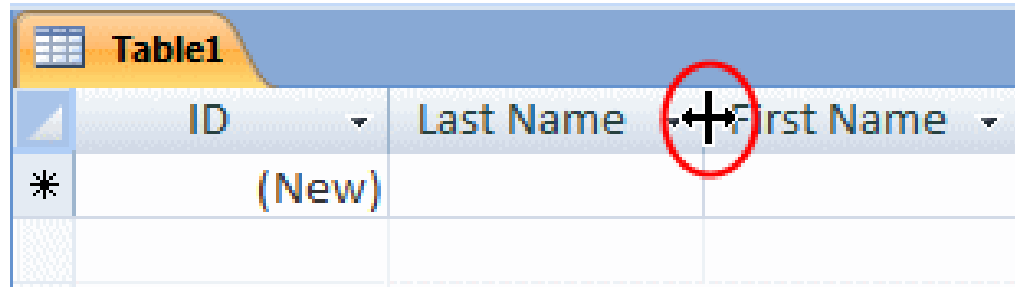
- ❑ The fields in the datasheet are displayed from left to right, in the order when design them.
- ❑ To move a column, click the column header to select column. Then, drag the column header to its new location.



ID	FreshPastaPreference	DriedPastaPreference	FirstName	LastName
1	Ravioli	Rigatoni	Carl	Avioli
*	(New)			

# Resizing Rows and Columns

- ❑ Resize a single column: Move the mouse to the column's right edge. Then click the edge and drag it to the left or to the right.

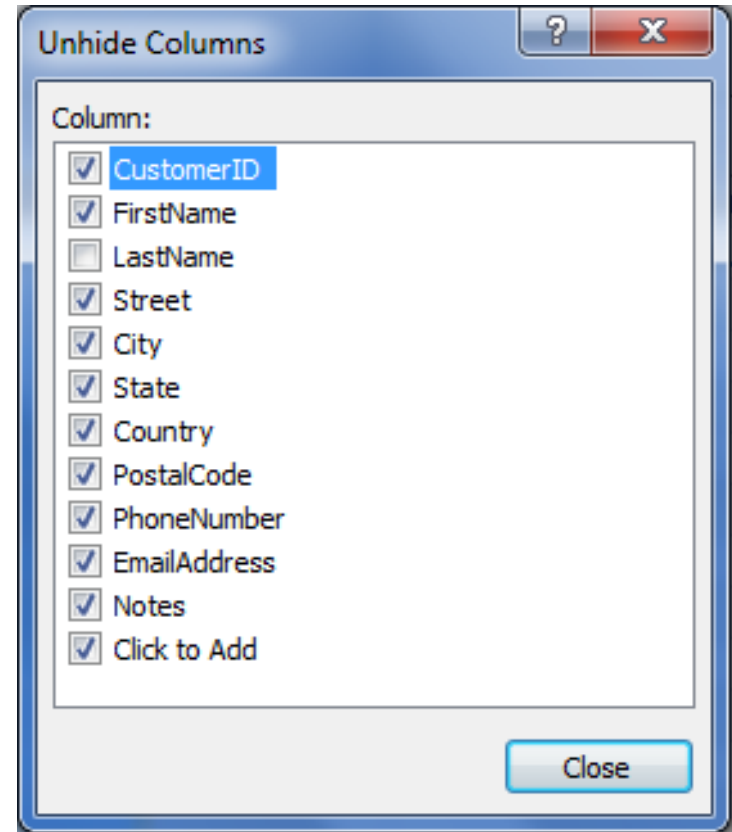


	ID	Last Name	First Name
*	(New)		

- ❑ Resize a column to fit its content. Double-click the right column edge. Access makes the column just wide enough to fit the field name or the largest value.

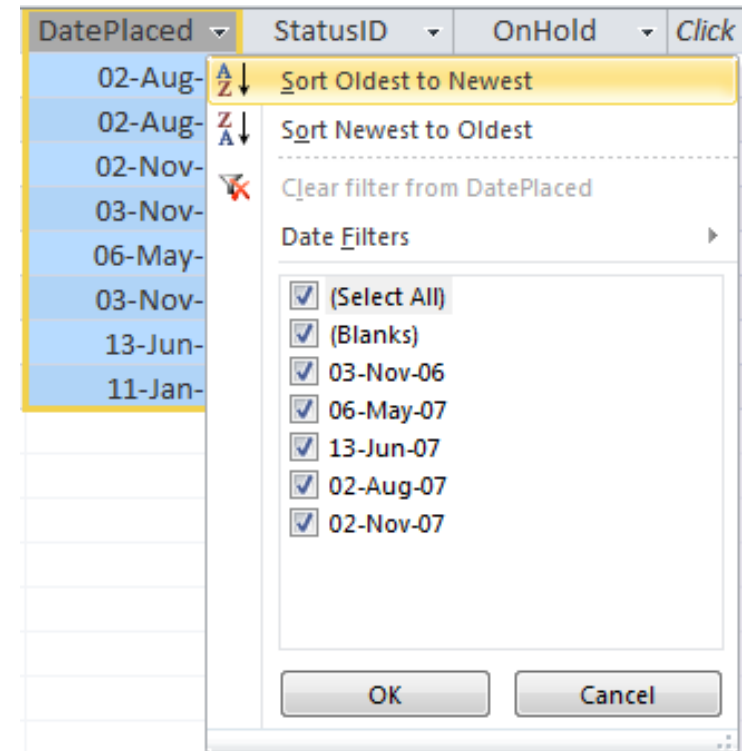
# Hiding Columns

- ❑ To hide a column:
  - Select the column by clicking the column header.
  - Right-click on column selected, and then choose Hide Fields.
  - To show hidden fields, select Unhide fields



# Sorting

- ❑ To sort the records, select a column you want to use to order the records.
- ❑ Click the drop-down arrow at the right edge of the column header, or click Filter button on the Ribbon.
- ❑ Choose one of the sort options at the top of the menu.



# Sorting

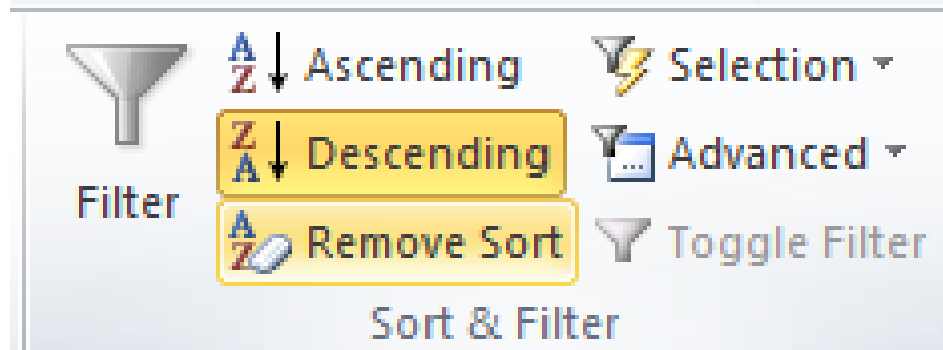
- Depending on the data type of the field, there are different sorting options

Data type	Sort option
Text, Memo, Hyperlink	Sort A to Z Sort Z to A
Number, Currency, AutoNumber	Sort Smallest to Largest Sort Largest to Smallest
Date/Time	Sort Oldest to Newest Sort Newest to Oldest
Yes/No	Sort Selected to Cleared Sort Cleared to Selected

# Sorting

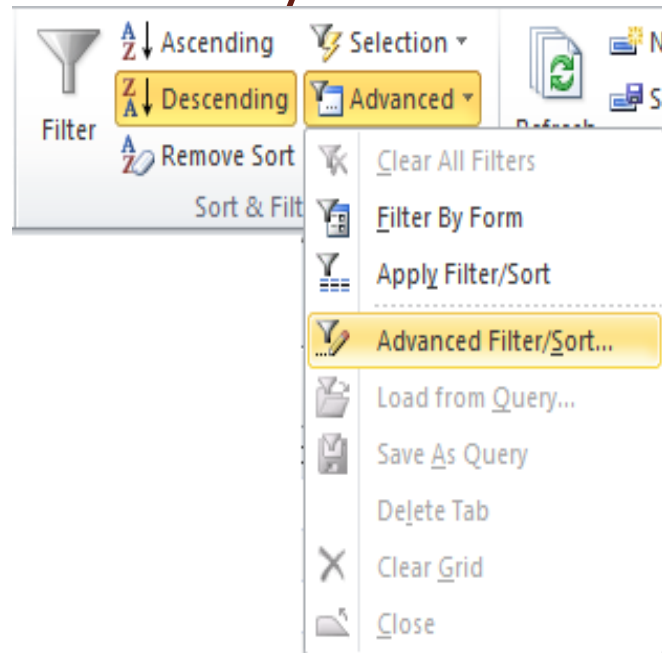
## ❑ Remove sort:

- Select Home → in Sort & Filter group click **Remove Sort** command to return your table to its original, unsorted order.



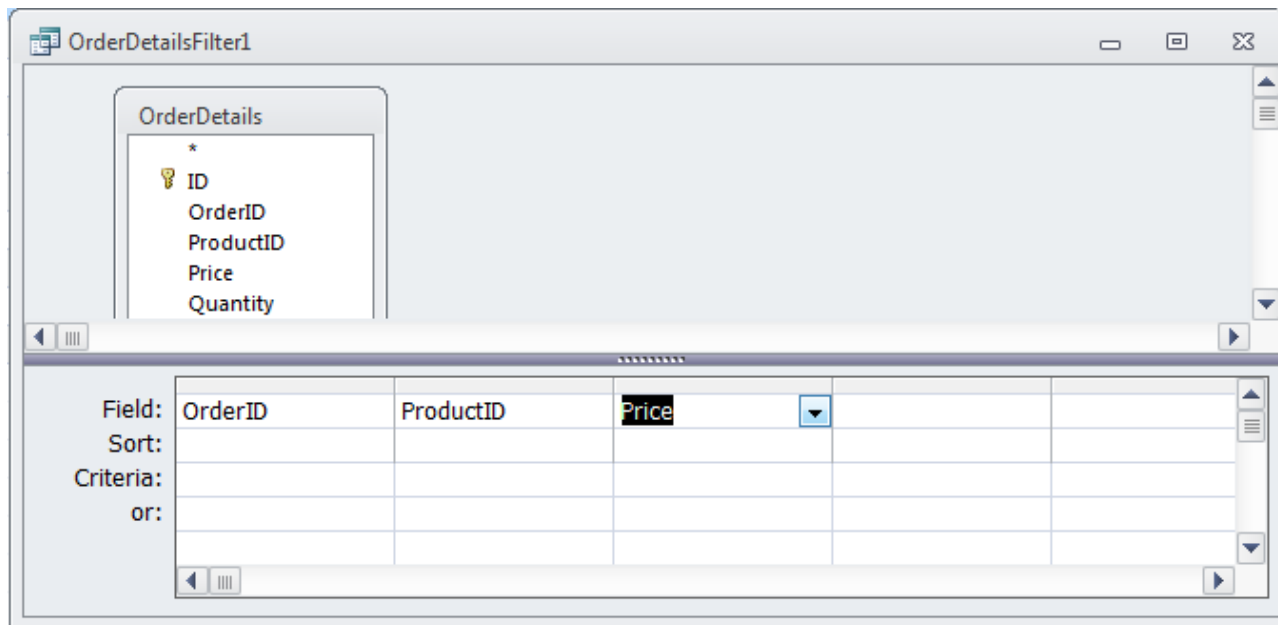
# Sorting on multiple fields

- ❑ Select Home tab → in Sort & Filter group
- ❑ Click the drop-down arrow at the right of the Advanced command
- ❑ Select Advanced Filter/Sort...



# Sorting on multiple fields

- ❑ In the Advanced filter/sort:
  - Field: select field that you want to sort
  - Sort: select sort type
  - Criteria: enter the condition



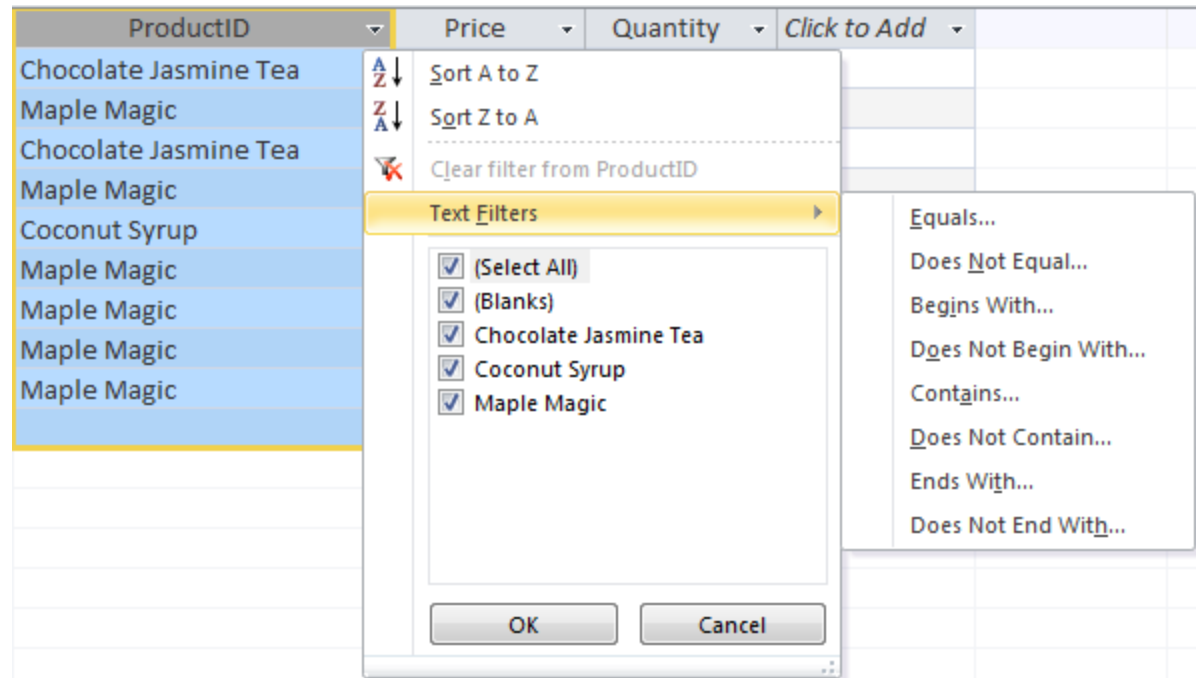
# Filtering

---

- ❑ To filter records, you specify a condition that the record must meet to be included in the datasheet.
- ❑ When you apply a filter condition, you end up hiding all the records that don't match your requirements.

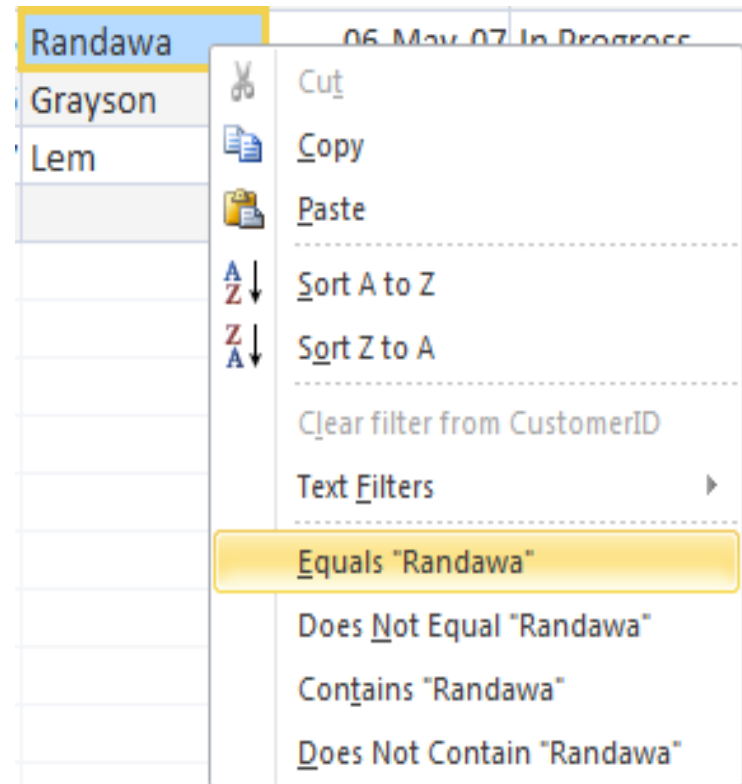
# Quick filters

- ❑ A quick filter lets you choose what values you want to include and which ones you want to hide, based on the current contents of your table.



# Filter by selection

- ❑ Filter by selection: apply a filter based on any value in table. It return exactly the type of record you want to include or exclude.
  - Find the value to use for filtering in the datasheet.
  - Right-click the value, and then choose one of the filter options at the end of the menu



# Filter by selection

---

- ❑ *Text-based data types*: Filter values that match exactly, or values that contain a piece of text.
- ❑ *Numeric data types*: Filter values that match exactly, or numbers that are smaller or larger than the current number.
- ❑ *Date data types*: Filter values that match exactly, or dates that are older or newer than the current date.

# Filter by condition

---

- ❑ Filter by condition: define exactly the filter you want. First, click the drop-down arrow at the right edge of the column header.
- ❑ Look for a submenu with filtering options. This menu is named according to the data
  - Text fields include a Text Filters option.
  - Number fields have a Number Filters option...

# Searching

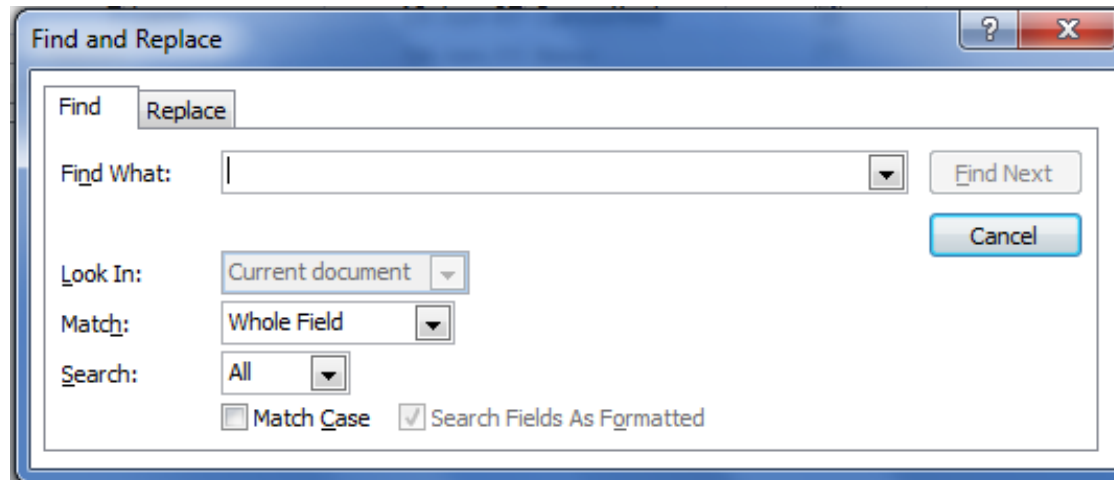
- ❑ A *quick search* feature that lets you scan your datasheet for specific information, by use the search box near the record navigation controls.
  - Type in the text you want to find. The first match in the table is highlighted automatically.
  - Press Enter to search for subsequent matches.

+	5	Randawa	06-May-07	In Progress
+	6	Grayson	03-Nov-06	Shipped
+	7	Lem	13-Jun-07	Cancelled
*	(New)		14-Jan-11	New

Record: 4 of 7    No Filter

# Searching

- ❑ Use the Find feature:
  - Choose Home → In Find group, click Find button. (Or press Ctrl + F)
  - Find what: The text you're looking for.



# Searching

---

- **Look In:** choose between searching a single field or the entire table
- **Match:** Lets you specify whether values need to match exactly.
- **Search:** Sets the direction Access looks
- **Match Case:** If selected, finds only matches that have identical capitalization.
- **Search Fields As Formatted:** If selected, means Access searches the value as it appears on the datasheet

# Blocking Bad Data

---

## ❑ Preventing Blank Fields:

- Select the field that you want to make mandatory in Design view.
- Set the **Required** property to Yes.

## ❑ Setting Default Values:

- The fields in your tables are filled a default value by set Default value property.
- Access inserts the default value when you create a new record.

# Blocking Bad Data

---

- ❑ **Preventing Duplicate Values with Indexes**
  - You can force a field to require unique values with an index.
  - To add an index and prevent duplicates, you can change the Indexed property in Design view to
    - Yes [No Duplicates].
    - Yes [Duplicates OK], creates an index but lets more than one record have the same value. This option used to speed up searches

# Blocking Bad Data

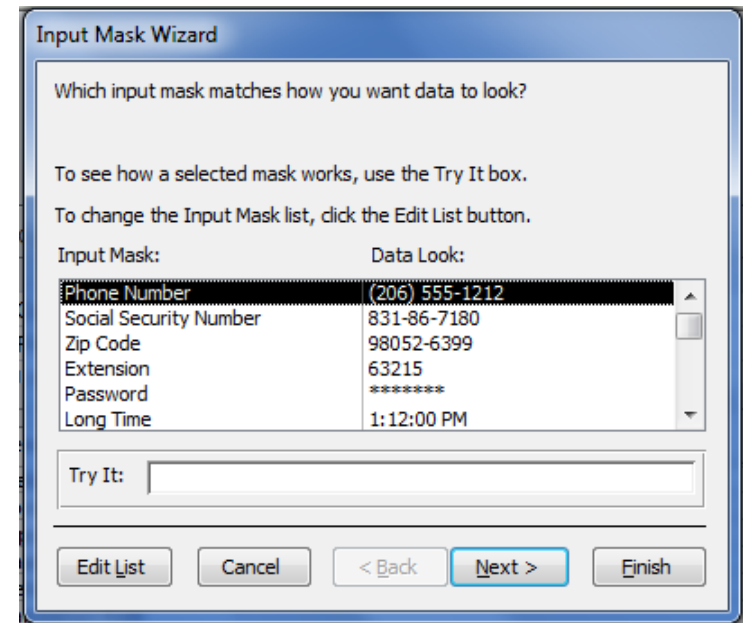
---

- ❑ **Input Masks:** To help you manage value with a fixed pattern, Base this pattern, Access changes the way values are entered and edited to make them easier to understand and less error-prone.
- ❑ Masks give you several advantages over ordinary text:
  - Masks guide data entry.
  - Masks make data easier to understand.
  - Masks prevent errors.
  - Masks prevent confusion.

# Blocking Bad Data

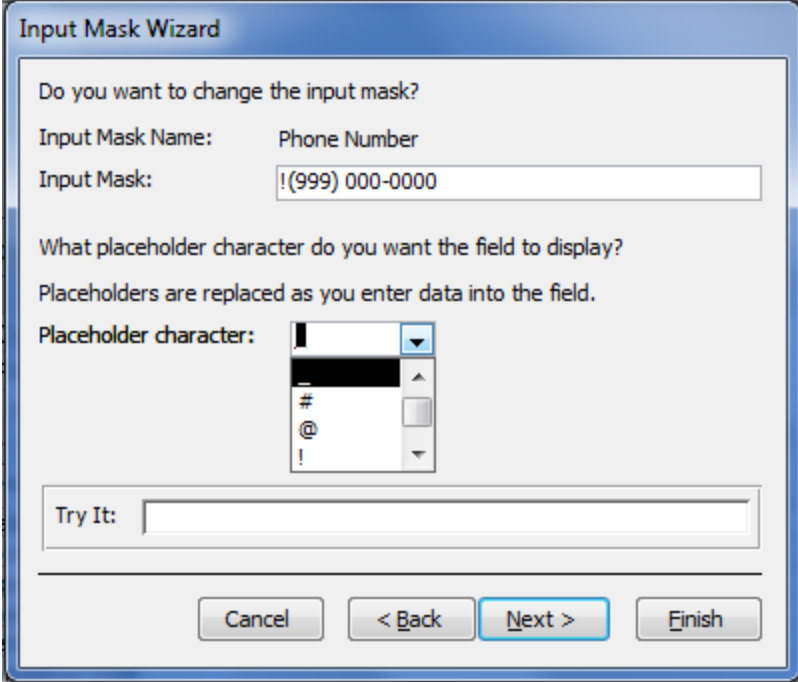
## □ Using a Readymade Mask:

- In Design view, select the text field where you want to apply the mask.
- Look for the Input Mask field property. Click (...) button appears at the right edge.
- The Input Mask wizard starts.
- Choose the mask from the list of options → Next.



# Blocking Bad Data

- ❑ Can change the mask or the placeholder character by select placeholder character type in dropdown list → Next → Finish.



The screenshot shows the 'Input Mask Wizard' dialog box. It contains the following elements:

- Title:** Input Mask Wizard
- Question:** Do you want to change the input mask?
- Input Mask Name:** Phone Number
- Input Mask:** A text box containing the mask `!(999) 000-0000`.
- Instruction:** What placeholder character do you want the field to display? Placeholders are replaced as you enter data into the field.
- Placeholder character:** A dropdown menu with a list of characters: `!`, `#`, `@`, and `!`.
- Try It:** A text box for testing the mask.
- Buttons:** Cancel, < Back, Next >, and Finish.

# Blocking Bad Data

---

- ❑ **Creating Your Own Mask:** Every mask is built out of three types of characters:
  - *Placeholders designate:* designate where you type in a character.
  - *Special characters:* give additional instructions that tell Access how to treat a part of the mask.
  - *Literals:* are all other characters, which are really just decoration.

# Blocking Bad Data

## Placeholder Characters for an Input Mask

Character	Description
0	A required digit (0 through 9).
9	An optional digit (0 through 9).
#	An optional digit, a plus sign (+), or a minus sign (-)
L	A required letter
?	An optional letter
A	A required letter or digit.
a	An optional letter or digit.
&	A required character of any type
C	An optional character of any type

# Blocking Bad Data

## ❑ Special Characters for an Input Mask

Character	Description
!	Indicates that the mask is filled from left to right when characters are typed in.
<	Converts all characters that follow to lowercase.
>	Converts all characters that follow to uppercase.
\	Indicates that the following character should be treated as a literal
Password	Creates a password entry box. Any character you type in the box is stored as the character but displayed as an asterisk (*).

# Validation Rules(Page 138)

---

- ❑ **Validation rule** lets user to validate the data entry by applying desired constraints over the field.
- ❑ **Applying a Field Validation Rule:**
  - In Design view, select the field to which you want to apply the rule.
  - In the Validation Rule field property, type a validation expression.
  - Type some error-message text in the Validation Text property.

# Validation Rules

- ❑ Open a table on which you want to apply validation rule.
- ❑ Select the field on which you want to apply field validation.
- ❑ Now navigate to *Fields* tab, from *Validation* click *Field Validation Rule*, to write an validation expression

The screenshot shows the Microsoft Access Field Properties dialog box with the **Fields** tab selected. The **Validation** button is highlighted with a red box. Below the dialog box, a table displays data for two courses.

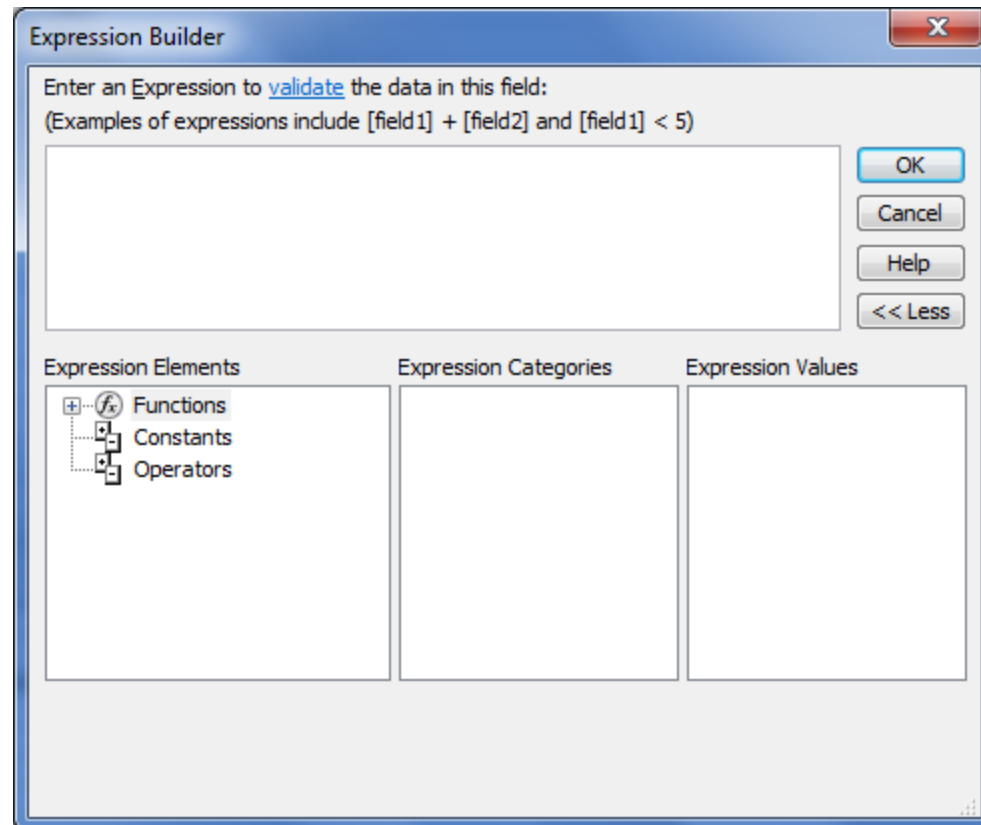
Course	Marks	Grade	Status
Software Engineering	60	C	Pass
Requirement Engineering	90	A	Pass

**Field Validation Rule**  
Create an expression that restricts the values that can be entered in the field.

**Field Validation Message**  
Set the error message for the Field Validation Rule.

# Validation Rules

- ❑ You will reach *Expression Builder* dialog, here you can write expression to validate the field entries



# Validation Rules

- ❑ Click *OK*, to apply it over.
- ❑ Write a *Validation* message:
  - Click *Field Validation Message*.



- Enter message you want to show, in case of any invalid entry. Click *OK*.

# Lookups

---

- ❑ Lookups are one more tool to help standardize your data, lets you fill a value in a field by choosing from a readymade list.
- ❑ Access has two basic types of lookup lists: lists with a set of fixed values that you specify, and lists that are drawn from a linked table.

# Lookups

---

- ❑ **Creating a Simple Lookup with Fixed Values**
  - Open the table in Design view.
  - Find the field where you want to add the lookup.
  - Make sure your field has the correct data type.
  - Choose Lookup Wizard from the data type list.
  - Choose “I will type in the values that I want”
  - Click Next.
  - Choose whether you want the lookup column to store multiple values → Next → Finish.

# Lookups

---

## ❑ Adding New Values to Your Lookup List

- In Design view, go to the field that has the lookup.
- In the Field Properties section, click the Lookup tab.
- Set the “Limit to List” property to Yes.
- Optionally, set Allow Value List Edits to Yes.