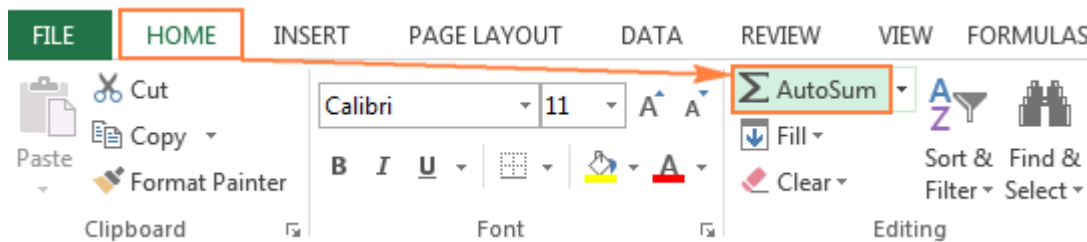# Advance Excel Assignment 3

1. **How and when to use the AutoSum command in excel?**
   If you need to sum a column or row of numbers, let Excel do the math for you. Select a cell next to the numbers you want to sum, click AutoSum on the Home tab, press Enter, and you're done.

   The AutoSum button is available in 2 locations on the Excel ribbon.
   Home tab > Editing group > AutoSum:

   Formulas tab > Function Library group > AutoSum:
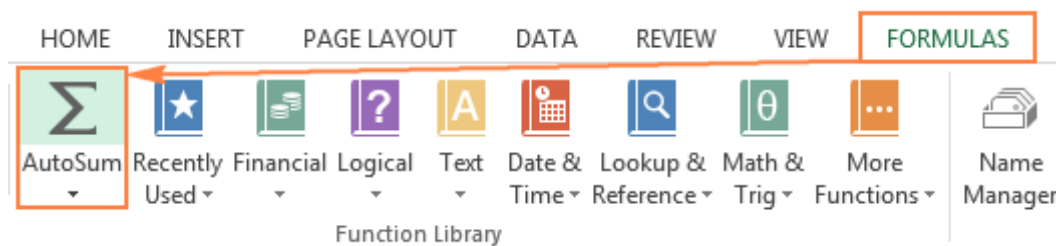
   When you click AutoSum, Excel automatically enters a formula (that uses the SUM function) to sum the numbers.

   Whenever you need to sum a single range of cells, whether a column, row or several adjacent columns or rows, you can have Excel AutoSum to automatically make an appropriate SUM formula for you.

   To use AutoSum in Excel, just follow these 3 easy steps:

   Step 1: Select a cell next to the numbers you want to sum:
   To sum a column, select the cell immediately below the last value in the column.
   To sum a row, select the cell to the right of the last number in the row.

Sum a column

	A	B	C
1	Item	Jan	Feb
2	Apples	$120	$320
3	Oranges	$200	$190
4	Lemons	$220	$210
5	Grapes	$180	$170
6	Peaches	$300	$310
7	Total		

Sum a row

	A	B	C	D	E
1	Item	Jan	Feb	Mar	Total
2	Apples	$120	$320	$200	
3	Oranges	$200	$190	$0	
4	Lemons	$220	$210	$220	
5	Grapes	$180	$170	$240	
6	Peaches	$300	$310	$190	

Step 2: Click the AutoSum button on either the Home or Formulas tab.
A Sum formula appears in the selected cell, and a range of cells you're adding gets highlighted (B2:B6 in this example):
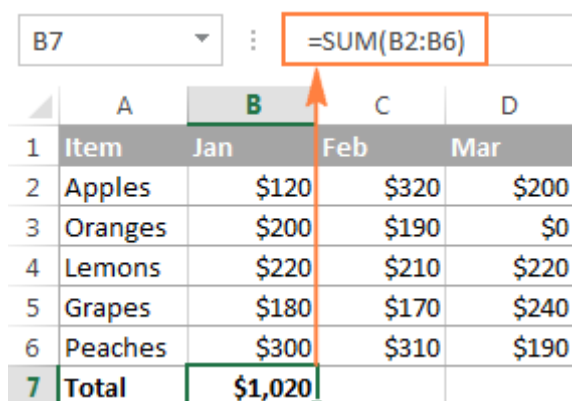
FILE   HOME   INSERT   PAGE LAYOUT   DATA

Cut
Copy
Paste
Format Painter
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11   A A
B I U

Σ AutoSum
Fill
Clear
Editin

Font

VLOOKUP   fx   =SUM(B2:B6)

	A	B	C	D	E	F	G
1	Item	Jan	Feb	Mar			
2	Apples	$120	$320	$200			
3	Oranges	$200	$190	$0			
4	Lemons	$220	$210	$220			
5	Grapes	$180	$170	$240			
6	Peaches	$300	$310	$190			
7	Total	=SUM(B2:B6)					
8		SUM(number1, [number2], ...)					

In most cases, Excel selects the correct range to total. In a rare case when a wrong range is selected, you can correct it manually by typing the desired range in the formula or by dragging the cursor through the cells you want to sum.

Tip. To sum multiple columns or rows at a time, select several cells at the bottom or to the right of your table, respectively, and then click the AutoSum button.

Step 3: Press the Enter key to complete the formula.

Now, you can see the calculated total in the cell, and the SUM formula in the formula bar:

| B7 | ▼ | ⋮ | =SUM(B2:B6) |

◢	A	B	C	D
1	Item	Jan	Feb	Mar
2	Apples	$120	$320	$200
3	Oranges	$200	$190	$0
4	Lemons	$220	$210	$220
5	Grapes	$180	$170	$240
6	Peaches	$300	$310	$190
7	Total	$1,020		

2. What is the shortcut key to perform AutoSum?

If you one of those Excel users that prefer working with the keyboard rather than the mouse, you can use the following Excel AutoSum keyboard shortcut to total cells:

Alt **+** =

Pressing the Equal Sign key while holding the Alt key inserts a Sum formula in a selected cell(s) exactly like pressing the AutoSum button on the ribbon does, and then you hit the Enter key to complete the formula.

3. How do you get rid of Formula that omits adjacent cells?

The 'Formula Omits Adjacent Cells' is Excel's way of saying you better recheck your formula for any missing or extra cells. You'd often see this error while running the SUM, AVERAGE, COUNT, and other mathematical or statistical functions in Excel.

Why this error appears
Let's see this through the example below:
In the image below we are adding up two lists of numbers.

◢	A	B	
1	List 1	List 2	
2	10	10	
3	10	10	
4	10	10	
5	10	10	
6	10	10	
7	10	10	
8			

Each of these rows has six numbers.

For the first list, we are summing up all the numbers.

A8	▼	⋮	✕	✓	f_x	=SUM(A2:A7)

	A	B
	A	**B**
1	**List 1**	**List 2**
2	10	10
3	10	10
4	10	10
5	10	10
6	10	10
7	10	10
8	**60**	
9		

For the second list, we are summing up only the first five numbers.

B8	▼	⋮	✕	✓	f	=SUM(B2:B6)

	A	B
	A	**B**
1	**List 1**	**List 2**
2	10	10
3	10	10
4	10	10
5	10	10
6	10	10
7	10	10
8	**60**	**50**
9		

Did you see that yellow error icon and a green flag to the top left of the cell containing the sum for List 2.

B8	:	×	✓	fx	=SUM(B2:B6)	

	A	B
1	**List 1**	**List 2**
2	10	10
3	10	10
4	10	10
5	10	10
6	10	10
7	10	10
8	**60** ⚠	**50**
9		

Also, note that there's no such sign or flag on the SUM for List 1.
Hover your cursor around the yellow error icon to see which error is this.
The "Formula omits adjacent cells" error.

	A	B
2	10	10
3	10	10
4	10	10
5	10	10
6	10	10
7	10	10
8	**60** ⚠ ▾	**50**
9		Formula Omits Adjacent Cells
10		Update Formula to Include Cells
11		Help on this Error
12		Ignore Error
13		Edit in Formula Bar
14		Error Checking Options...

This error is caused because we summed only five cells (B2:B6) for list 2.
So, we have omitted Cell B7 from the SUM formula for List 2. Whereas Cell B7 also contains a number. As all the numbers in List (A1:A7) are summed up – we have no such error there.
With that said, Excel thinks you have mistakenly left out Cell B7. That's when Excel tells you that your formula SUM(B2:B6) omits adjacent cells (B7).
There are several ways you can fix this error in Excel. We will cover them all now.

Fix #1: Change formulas to include adjacent cells
The first and easiest way to get rid of this error is to adjust your formulas:
You can change the SUM for List 2 from SUM (B2:B6) to SUM (B2:B7).

| B8 | ▼ | ⋮ | × | ✓ | *fx* | =SUM(B2:B7) |

	A	B
1	**List 1**	**List 2**
2	10	10
3	10	10
4	10	10
5	10	10
6	10	10
7	10	10
8	**60**	**60**
9		

With this, technically, you have removed the error Excel thought you made. So the Error signs (the green flag and yellow icon) are also removed.

Fix #2: Remove unused values
If you do not want to include Cell B7 in your calculation, remove its value from List 2.

| B8 | ▼ | ⋮ | × | ✓ | *fx* | =SUM(B2:B7) |

	A	B
1	**List 1**	**List 2**
2	10	10
3	10	10
4	10	10
5	10	10
6	10	10
7	10	
8	**60**	**50**
9		

We have only deleted the extra value causing the error (10 in Cell B7). And see, no more error signs or green flags. However, these are not some very practical ways to get rid of this error. You might not want to include B7 in your calculation. Maybe you genuinely want to sum the cells B2:B6 only.

Alternatively, you might want to retain the value in Cell B7, and deleting it might cause you to lose some data you never wanted to lose. Don't worry – here are other ways how you can remove this error in Excel without having to change your formulas or dataset.
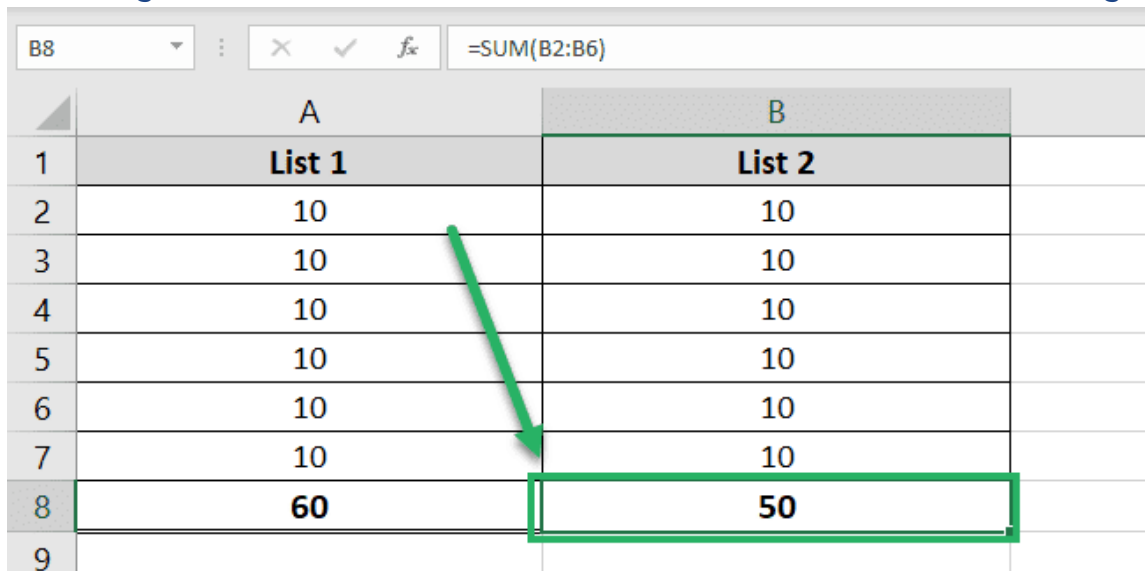
Fix #3: Ignore the Error to remove the green triangle
If your formulas are all set and the error has no relevance to you, you can choose to ignore it. To ignore this error and get rid of the error icons surrounding the relevant cell:

1. Select the cell where the error occurs (Cell B9). The yellow error sign will appear.
2. Click on the drop-down menu icon next to this error sign. The following list will appear:

4	10	10
5	10	10
6	10	10
7	10	10
8	60	50

Formula Omits Adjacent Cells
Update Formula to Include Cells
Help on this Error
Ignore Error
Edit in Formula Bar
Error Checking Options...
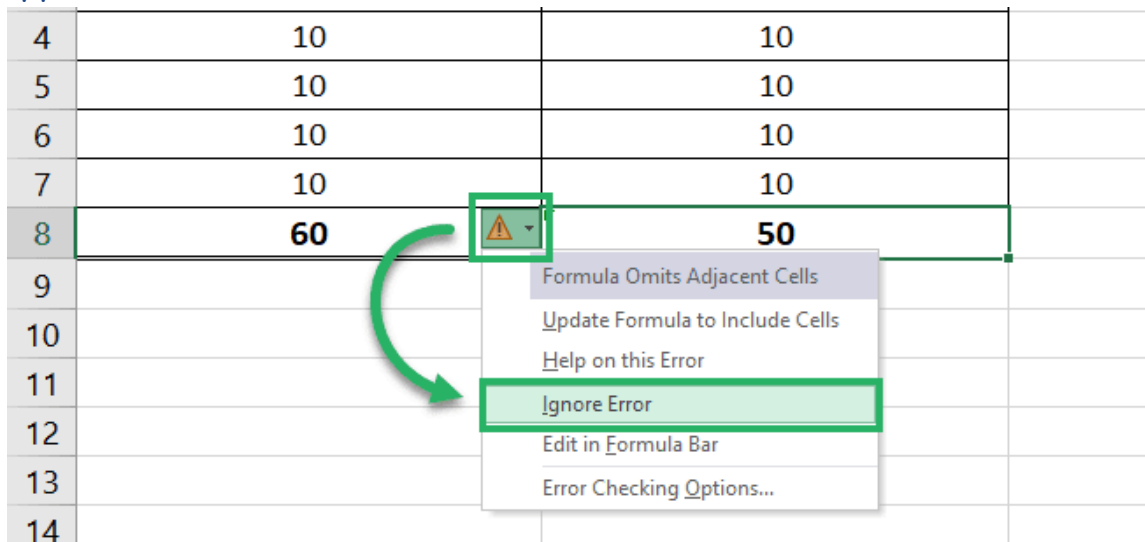
3. Click on Ignore Error from this list as shown above. And the error icons will go away.

B8 f_x =SUM(B2:B6)

	A	B
1	**List 1**	**List 2**
2	10	10
3	10	10
4	10	10
5	10	10
6	10	10
7	10	10
8	**60**	**50**
9		

This is your way of telling Excel, "Thanks for your input, but I know my job!". If you have multiple such errors in other cells of your sheet, you'd have to ignore them for each cell showing this error.

Fix #4: Permanently remove the green triangle for this error
If you are done ticking off the error for each cell, root it out once and for all. To permanently remove the green triangle caused by the 'Formula omits Adjacent cells error' follow these steps:
1. Go to the File tab > Options.
2. Under the dialog box for Excel Options, go to Formulas from the left pane.
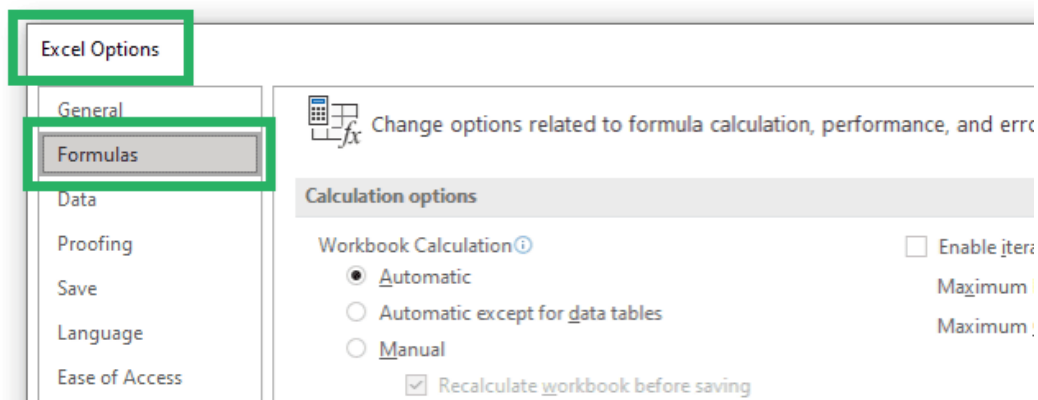
3. Under the section Error checking rules, uncheck the box for Formulas that omit cells in a region.
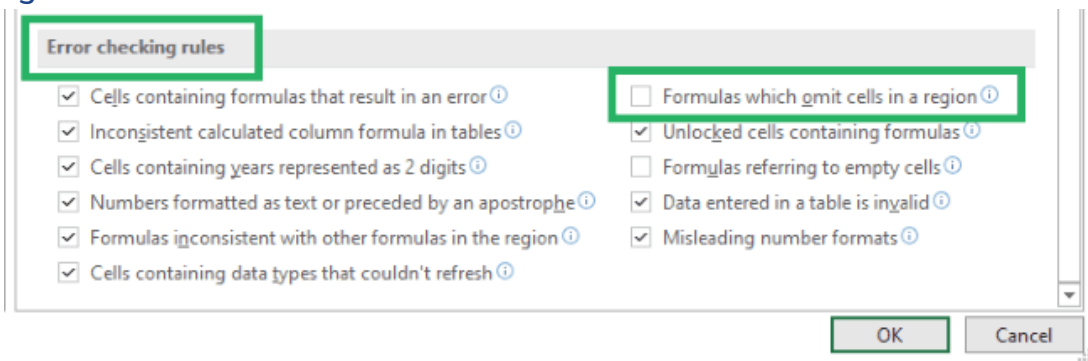
Excel will now no longer pose the Formula omits adjacent cells error.

4. **How do you select non-adjacent cells in Excel 2016?**

Dragging with the mouse in Excel to quickly highlight a block of adjacent <u>cells</u> is probably the most common way of selecting more than one cell in a <u>worksheet</u>. But, there may be times when the cells you want to highlight are not located beside each other.

When this occurs, it's possible to select non-adjacent cells. Although selecting non-adjacent cells can be done solely with the keyboard, it's easier to do when you use the keyboard and mouse together.

Select Non-Adjacent Cells with Keyboard and Mouse.
1. With your mouse, click the first cell you want to highlight. This cell becomes the active cell.
2. Press and hold the Ctrl key on the keyboard.
3. Click the rest of the cells you want to highlight.
4. Once the desired cells are highlighted, release the Ctrl key.
5. Do not click anywhere else with the mouse pointer once you release the Ctrl key or you will clear the highlight from the selected cells.
6. If you release the Ctrl key too soon and wish to highlight more cells, press and hold the Ctrl key again and click the additional cell(s).

Use Only the Keyboard to Select Non-Adjacent Cells.
The steps below cover selecting cells using only the keyboard.

Use the Keyboard in Extended Mode

To select non-adjacent cells with only the keyboard requires you to use the keyboard in Extended mode. Extended mode is activated by pressing the F8 key on the keyboard. You can shut off extended mode by pressing the Shift and F8 keys on the keyboard together.

Select Single Non-Adjacent Cells

1. Move the cell cursor to the first cell you want to highlight.
2. Press and release the F8 key on the keyboard to start Extended mode and to highlight the first cell.
3. Without moving the cell cursor, press and release the Shift+F8 keys on the keyboard together to shut off Extended mode.
4. Use the arrow keys on the keyboard to move the cell cursor to the next cell you wish to highlight. The first cell remains highlighted.
5. With the cell cursor on the next cell to be highlighted, repeat steps 2 and 3 above.
6. Continue to add cells to the highlighted range by using the F8 and Shift+F8 keys to start and stop Extended mode.

Select Adjacent and Non-Adjacent Cells.

Follow the steps below if the range you wish to select contains a mixture of adjacent and individual cells.

1. Move the cell cursor to the first cell in the group of cells you want to highlight.
2. Press and release the F8 key on the keyboard to start *Extended Mode*.
3. Use the arrow keys on the keyboard to extend the highlighted range to include all cells in the group.
4. With all cells in the group highlighted, press and release the Shift+F8 keys to shut off extended mode.
5. Use the arrow keys on the keyboard to move the cell cursor away from the highlighted group of cells. The first group of cells remains highlighted.
6. If there are more grouped cells you wish to highlight, move to the first cell in the group and repeat steps 2 to 4 above.

5. **What happens if you choose a column, hold down the Alt key and press the letters ocw in quick succession?**
The column width dialogue box opens allowing you to set the exact width of the column.

6. **If you right-click on a row reference number and click on Insert, where will the row be added?**
The new row will be added above the selected row reference number.