Step 1: Create a New Excel Spreadsheet and include the information as indicated in the screenshot below. It is recommended that you include the Headings in the same cells as indicated. For example, type "Homework" in Cell A1, "Categories" in Cell C1, etc.

Note: It is not necessary to include the various colors in your cells.

Hint: You may want to adjust the width of the cells to accommodate the length of the words or phrases. For a quick tutorial on how to do this, see the following video. https://www.youtube.com/watch?v=KnxVn6lAEvQ

Step 2: List the Categories in Column C as indicated below.

Note: You do not need to color in the cell for Homework Average. The color in the sheet below is to indicate that we will be using a formula to input the average.

	A	B	C	D	E	F	G	H	I	J
1	**Homework**		**Categories**	**Scores**	**Weights**					
2			Homework Average							
3			Midterm				**Sum of Weights**			
4			Project 1				**Sum of Weighted Scores**			
5			Project 2							
6			Final Exam				**Overall Grade**			
7										
8										
9										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										

Step 3: Input the Homework Scores in Column A as shown below.

	Homework		Categories	Scores	Weights				
	75.00		Homework Average						
	82.00		Midterm			Sum of Weights			
	90.00		Project 1			Sum of Weighted Scores			
	43.00		Project 2						
	97.00		Final Exam			Overall Grade			
	86.00								
	78.00								
	84.00								
	32.00								
	75.00								
	71.00								
	91.00								
	73.00								
	62.00								
	70.00								

Step 4: We will use the Excel function, AVERAGE, to compute the Homework Average in Cell D2.

In Cell D2, type: "=AVERAGE(A2:A16)".

Note: Only type in the information between the quotation marks, not the quotation marks themselves.

Hint: We will have all of the data in our cells display 2 decimal places. For assistance on how to do this, refer to the following video.

https://www.youtube.com/watch?v=QRhckZDdoZk

Step 5: After the Homework Average formula is input, the following quantity should appear in Cell D2.

	Homework		Categories	Scores	Weights				
1	**Homework**		**Categories**	**Scores**	**Weights**				
2	75.00		Homework Average	**73.93**					
3	82.00		Midterm				**Sum of Weights**		
4	90.00		Project 1				**Sum of Weighted Scores**		
5	43.00		Project 2						
6	97.00		Final Exam				**Overall Grade**		
7	86.00								
8	78.00								
9	84.00								
10	32.00								
11	75.00								
12	71.00								
13	91.00								
14	73.00								
15	62.00								
16	70.00								
17									
18									
19									

Step 6: Type in the remaining Scores and Weights for each category in columns D and E, respectively.

	Homework		Categories	Scores	Weights			
1	**Homework**		**Categories**	**Scores**	**Weights**			
2	75.00		Homework Average	**73.93**	**0.15**			
3	82.00		Midterm	**84.00**	**0.20**		**Sum of Weights**	
4	90.00		Project 1	**73.00**	**0.20**		**Sum of Weighted Scores**	
5	43.00		Project 2	**90.00**	**0.20**			
6	97.00		Final Exam	**72.00**	**0.25**		**Overall Grade**	
7	86.00							
8	78.00							
9	84.00							
10	32.00							
11	75.00							
12	71.00							
13	91.00							
14	73.00							
15	62.00							
16	70.00							
17								
18								
19								

Step 7: To calculate the Sum of the Weights (H3), we will use the SUM function and indicate that the function should sum the weights from (E2:E6).

In Cell H3, type: "=SUM(E2:E6)".

Step 8: To calculate the Sum of the Weighted Scores (H4), we will use the Excel function "SUMPRODUCT" where it uses the scores from (D2:D6) and the corresponding weights from (E2:E6).

In Cell H4, type: "=SUMPRODUCT(D2:D6,E2:E6)".

Excel screenshot showing formula bar with =SUMPRODUCT(D2:D6,E2:E6)

	A	B	C	D	E	F	G	H
1	**Homework**		**Categories**	**Scores**	**Weights**			
2	75.00		Homework Average	73.93	0.15			
3	82.00		Midterm	84.00	0.20		**Sum of Weights**	**1.00**
4	90.00		Project 1	73.00	0.20		**Sum of Weighted Scores**	=SUMPRODUCT(D2:D6,E2:E6)
5	43.00		Project 2	90.00	0.20			SUMPRODUCT(array1, [array2], [array3], [array4], ...)
6	97.00		Final Exam	72.00	0.25		**Overall Grade**	
7	86.00							
8	78.00							
9	84.00							
10	32.00							
11	75.00							
12	71.00							
13	91.00							
14	73.00							
15	62.00							
16	70.00							

Step 9: To compute the Overall Grade (H6) , we need to divide the Sum of Weighted Scores (H4) by the Sum of Weights (H3).

In Cell H6, type: "=H4/H3".

Formula bar: =H4/H3

	A	B	C	D	E	F	G	H
1	**Homework**		**Categories**	**Scores**	**Weights**			
2	75.00		Homework Average	73.93	0.15			
3	82.00		Midterm	84.00	0.20		**Sum of Weights**	1.00
4	90.00		Project 1	73.00	0.20		**Sum of Weighted Scores**	78.49
5	43.00		Project 2	90.00	0.20			
6	97.00		Final Exam	72.00	0.25		**Overall Grade**	=H4/H3
7	86.00							
8	78.00							
9	84.00							
10	32.00							
11	75.00							
12	71.00							
13	91.00							
14	73.00							
15	62.00							
16	70.00							
17								
18								
19								

Step 10: When you have completed the spreadsheet, it should show the following quantities.

	A	B	C	D	E	F	G	H
1	**Homework**		**Categories**	**Scores**	**Weights**			
2	75.00		Homework Average	73.93	0.15			
3	82.00		Midterm	84.00	0.20		**Sum of Weights**	1.00
4	90.00		Project 1	73.00	0.20		**Sum of Weighted Scores**	78.49
5	43.00		Project 2	90.00	0.20			
6	97.00		Final Exam	72.00	0.25		**Overall Grade**	78.49
7	86.00							
8	78.00							
9	84.00							
10	32.00							
11	75.00							
12	71.00							
13	91.00							
14	73.00							
15	62.00							
16	70.00							
17								
18								
19								

Congratulations! You are now ready to explore various scenarios and the spreadsheet will do the computations for you!