Lab-5

Basic statistics

Use the provided data in Table 1 to calculate all statistical results and fill the table using python.
(write and comment your own code)

No.	Outdoor_temp x_i	Supply_temp y_i	$(y_i-\bar{y})$	$(x_i-\bar{x})$	$(y_i-\bar{y})^2$	$(x_i-\bar{x})^2$	$(y_i-\bar{y})(x_i-\bar{x})$
1	7.8	32.1					
2	7.3	32.6					
3	2.7	37.4					
4	2.0	38.3					
5	2.9	37.3					
6	3.7	36.5					
7	4.1	36.1					
8	4.3	35.8					
9	4.4	35.7					
10	4.3	35.7					
11	5.7	34.4					
12	4.6	35.5					
13	7.5	32.4					
14	9.6	30.2					

Table 1: Outdoor temperature and the corresponding supply water temperature for space heating of a building

Questions:

1. Add a predicted y column to table.
2. Draw scatter plot x and y then add a line with x and predicted y.