CPE 202
Hash Table Collision Strategy Worksheet

1. Using Separate Chaining, hash each of the provided values, in left to right order, into the provided table using the hash function hash(x) = x % 11. For example, hash(83) = 6 so 83 maps to index 6. The calculated index identifies the column the value maps to. The first value to map to a column goes in the first row, use the subsequent rows when there is a collision, first collision goes in the same column *second* row, second collision goes in the same column *third* row, et cetera, to indicate the chaining.

   Values = {68, 73, 7, 84, 119, 195, 172}

0	1	2	3	4	5	6	7	8	9	10
		68					**73**	**195**	**119**	
							7			
							84			
							172			

2. Using Linear Probing, hash each of the provided values, in left to right order, into the provided table using the hash function hash(x) = x % 11. For example, hash(83) = 6 so 83 maps to index 6.

Values = {68, 73, 7, 84, 119, 195, 172}

0	1	2	3	4	5	6	7	8	9	10
195	**172**	**68**					**73**	**7**	**84**	**119**

3. Using Quadratic Probing, hash each of the provided values, in left to right order, into the provided table using the hash function hash(x) = x % 11. For example, hash(83) = 6 so 83 maps to index 6.

Values = {68, 73, 7, 84, 119, 195, 172}

0	1	2	3	4	5	6	7	8	9	10
84	**195**	**68**			**172**		**73**	**7**	**119**	