

Frequency Table

The frequency table helps us in understanding how the data is spread in our dataset. It further helps us in creating a histogram to understand the data distribution in a better way.

In the given below snapshot, we are given data of the Age of various people and we need to create a frequency table for it to better understand how age is distributed in various categories/classes.

We are taking the size of the class i.e bin size = 5

	A	B	C	D	E	F
1	Age		Bin(Size=5)			
2	5		0			
3	24		C4 10 × 5			
4	14		=5+C3			
5	3					
6	6					
7	34					
8	4					
9	25					
10	27					
11	12					
12	23					
13	1					
14	8					
15	9					
16	10					
17	18					
18	33					
19	56					
20	42					

- Simply drag down after once applying the formula as shown below

	A	B	C	D	E	F
1	Age		Bin(Size=5)			
2	5		0			
3	24		5			
4	14		10			
5	3		15			
6	6		20			
7	34		25			
8	4		30			
9	25		35			
10	27		40			
11	12		45			
12	23		50			
13	1		55			
14	8		60			
15	9		65			
16	10		70			
17	18					
18	33					
19	56					
20	42					

- After this use the `=FREQUENCY(A2:A20, C2:C16)` function to calculate the frequency of Age in corresponding classes, As A2:A20 signifies data range and C2:C16 signifies class range

1	Age	Bin(Size=5)	
2	5	0	<code>=FREQUENCY(A2:A20, C2:C16)</code>
3	24	5	
4	14	10	
5	3	15	
6	6	20	
7	34	25	
8	4	30	
9	25	35	
10	27	40	
11	12	45	
12	23	50	
13	1	55	
14	8	60	
15	9	65	
16	10	70	
17	18		
18	33		
19	56		
20	42		

- After using the `=FREQUENCY()` function, we will get the below output

1	Age	Bin(Size=5)	
2	5	0	0
3	24	5	4
4	14	10	4
5	3	15	2
6	6	20	1
7	34	25	3
8	4	30	1
9	25	35	2
10	27	40	0
11	12	45	1
12	23	50	0
13	1	55	0
14	8	60	1
15	9	65	0
16	10	70	0
17	18		0
18	33		
19	56		
20	42		

Observation: Now Value corresponding to 5(under Bin column) is 4 which means there are 4 people with age in the interval 0-5, which can be clearly verified by looking into our dataset as these are people with ages 3,4,1 & 5.
Hence we infer that values under the Bin are the Upper limits.

Similarly, the value corresponding to 35(under Bin) is 2 which means 2 people have their respective ages within the 30-35 range and their ages are 34 & 33.