



Construct a frequency distribution table from the following cumulative frequency distribution

1.

Class-Interval	Cumulative Frequency
40 - 44	14
45 - 49	27
50 - 54	38
55 - 59	49
60 - 64	57

(i)

Class-Interval	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64
Frequency	14	15	11	11	8

(ii)

Class-Interval	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64
Frequency	14	13	11	11	8

(iii)

Class-Interval	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64
Frequency	14	13	16	11	8

(iv)

Class-Interval	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64
Frequency	14	11	13	11	8

(v)

Class-Interval	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64
Frequency	14	8	11	11	13

Construct a frequency distribution table from the following cumulative frequency distribution

2.

Class-Interval	Cumulative Frequency
19 - 23	10
23 - 27	26
27 - 31	42
31 - 35	54
35 - 39	62
39 - 43	73
43 - 47	89

(i)

Class-Interval	19 - 23	23 - 27	27 - 31	31 - 35	35 - 39	39 - 43	43 - 47
Frequency	10	16	18	12	8	11	16

(ii)

Class-Interval	19 - 23	23 - 27	27 - 31	31 - 35	35 - 39	39 - 43	43 - 47
Frequency	10	16	16	12	8	11	16

(iii)

Class-Interval	19 - 23	23 - 27	27 - 31	31 - 35	35 - 39	39 - 43	43 - 47
Frequency	10	16	16	17	8	11	16

Following are the ages (in years) of patients getting medical treatment in a hospital. Identify the cumulative frequency of the given grouped data.

3.

Age (in years)	10 - 15	16 - 21	22 - 27	28 - 33	34 - 39	40 - 45
No. of Patients	15	54	45	59	22	59

(i)

Age (in years)	Cumulative Frequency
10 - 15	15
16 - 21	69
22 - 27	114
28 - 33	173
34 - 39	195
40 - 45	254

(ii)

Age (in years)	Cumulative Frequency
10 - 15	15
16 - 21	74
22 - 27	119
28 - 33	178
34 - 39	200
40 - 45	254

(iii)

Age (in years)	Cumulative Frequency
10 - 15	15
16 - 21	69
22 - 27	119
28 - 33	178
34 - 39	200
40 - 45	259

(iv)

Age (in years)	Cumulative Frequency
10 - 15	15
16 - 21	60
22 - 27	114
28 - 33	173
34 - 39	195
40 - 45	254

(v)

Age (in years)	Cumulative Frequency
10 - 15	15
16 - 21	69
22 - 27	114
28 - 33	170
34 - 39	192
40 - 45	251

Following are the ages (in years) of patients getting medical treatment in a hospital. Identify the cumulative frequency of the given grouped data.

4.

Age (in years)	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40
No. of Patients	30	23	41	49	41	28

(i)

Age (in years)	Cumulative Frequency
10 - 15	30
15 - 20	53
20 - 25	99
25 - 30	148
30 - 35	189
35 - 40	217

(ii)

Age (in years)	Cumulative Frequency
10 - 15	30
15 - 20	58
20 - 25	99
25 - 30	148
30 - 35	189
35 - 40	212

(iii)

Age (in years)	Cumulative Frequency
10 - 15	30
15 - 20	53
20 - 25	94
25 - 30	140
30 - 35	181
35 - 40	209

(iv)

Age (in years)	Cumulative Frequency
10 - 15	30
15 - 20	53
20 - 25	94
25 - 30	143
30 - 35	184
35 - 40	212

(v)

Age (in years)	Cumulative Frequency
10 - 15	30
15 - 20	71
20 - 25	94
25 - 30	143
30 - 35	184
35 - 40	212

Following are the daily wages (in rupees) of labourers working in a factory. Identify the cumulative frequency of the given grouped data.

5.

Wages (in rupees)	200 - 230	231 - 261	262 - 292	293 - 323	324 - 354	355 - 385
Labourers	18	6	19	16	10	8

(i)

Wages (in rupees)	Cumulative Frequency
200 - 230	18
231 - 261	24
262 - 292	43
293 - 323	55
324 - 354	65
355 - 385	73

(ii)

Wages (in rupees)	Cumulative Frequency
200 - 230	18
231 - 261	24
262 - 292	41
293 - 323	57
324 - 354	67
355 - 385	75

(iii)

Wages (in rupees)	Cumulative Frequency
200 - 230	18
231 - 261	37
262 - 292	43
293 - 323	59
324 - 354	69
355 - 385	77

(iv)

Wages (in rupees)	Cumulative Frequency
200 - 230	18
231 - 261	26
262 - 292	45
293 - 323	61
324 - 354	71
355 - 385	77

(v)

Wages (in rupees)	Cumulative Frequency
200 - 230	18
231 - 261	24
262 - 292	43
293 - 323	59
324 - 354	69
355 - 385	77

Following are the daily wages (in rupees) of labourers working in a factory. Identify the cumulative frequency of the given grouped data.

6.

Wages (in rupees)	200 - 220	220 - 240	240 - 260	260 - 280	280 - 300	300 - 320
Labourers	16	12	16	5	14	5

(i)

Wages (in rupees)	Cumulative Frequency
200 - 220	16
220 - 240	28
240 - 260	44
260 - 280	49
280 - 300	63
300 - 320	68

(ii)

Wages (in rupees)	Cumulative Frequency
200 - 220	16
220 - 240	28
240 - 260	40
260 - 280	45
280 - 300	59
300 - 320	64

(iii)

Wages (in rupees)	Cumulative Frequency
200 - 220	16
220 - 240	32
240 - 260	44
260 - 280	49
280 - 300	63
300 - 320	68

(iv)

Wages (in rupees)	Cumulative Frequency
200 - 220	16
220 - 240	28
240 - 260	44
260 - 280	54
280 - 300	68
300 - 320	73

(v)

Wages (in rupees)	Cumulative Frequency
200 - 220	16
220 - 240	21
240 - 260	37
260 - 280	42
280 - 300	56
300 - 320	68

Identify the cumulative frequency of the given grouped data.

7.	<b>class interval</b>	21 - 31	32 - 42	43 - 53	54 - 64	65 - 75	76 - 86
	<b>frequency</b>	9	8	16	12	6	23

(i)

<b>class interval</b>	<b>Cumulative Frequency</b>
21 - 31	9
32 - 42	17
43 - 53	33
54 - 64	45
65 - 75	51
76 - 86	74

(ii)

<b>class interval</b>	<b>Cumulative Frequency</b>
21 - 31	9
32 - 42	17
43 - 53	33
54 - 64	42
65 - 75	48
76 - 86	71

(iii)

<b>class interval</b>	<b>Cumulative Frequency</b>
21 - 31	9
32 - 42	25
43 - 53	33
54 - 64	45
65 - 75	51
76 - 86	74

(iv)

<b>class interval</b>	<b>Cumulative Frequency</b>
21 - 31	9
32 - 42	32
43 - 53	48
54 - 64	60
65 - 75	66
76 - 86	74

(v)

<b>class interval</b>	<b>Cumulative Frequency</b>
21 - 31	9
32 - 42	17
43 - 53	31
54 - 64	43
65 - 75	49
76 - 86	72

Identify the cumulative frequency of the given grouped data.

8. 

<b>class interval</b>	20 - 29	29 - 38	38 - 47	47 - 56	56 - 65	65 - 74	74 - 83
<b>frequency</b>	22	22	10	19	23	18	6

(i) 

class interval	Cumulative Frequency
20 - 29	22
29 - 38	44
38 - 47	50
47 - 56	69
56 - 65	92
65 - 74	110
74 - 83	116

(ii) 

class interval	Cumulative Frequency
20 - 29	22
29 - 38	28
38 - 47	38
47 - 56	57
56 - 65	80
65 - 74	98
74 - 83	120

(iii) 

class interval	Cumulative Frequency
20 - 29	22
29 - 38	44
38 - 47	54
47 - 56	73
56 - 65	96
65 - 74	114
74 - 83	120

(iv) 

class interval	Cumulative Frequency
20 - 29	22
29 - 38	32
38 - 47	54
47 - 56	73
56 - 65	96
65 - 74	114
74 - 83	120

(v) 

class interval	Cumulative Frequency
20 - 29	22
29 - 38	44
38 - 47	54
47 - 56	70
56 - 65	93
65 - 74	111
74 - 83	117

Find the cumulative frequency of class 81-88 .

9. 

<b>Class-Interval</b>	49 - 56	57 - 64	65 - 72	73 - 80	81 - 88	89 - 96	97 - 104	105 - 112
<b>Frequency</b>	7	13	15	16	10	13	19	18

- (i) 64 (ii) 61 (iii) 62 (iv) 60 (v) 59

Find the cumulative frequency of class 89-98 .

10. 

<b>Class-Interval</b>	35 - 44	44 - 53	53 - 62	62 - 71	71 - 80	80 - 89	89 - 98	98 - 107
<b>Frequency</b>	17	13	21	18	23	15	16	5

- (i) 123 (ii) 122 (iii) 120 (iv) 124 (v) 125

The following cumulative frequency table represents which of the following frequency distribution

11.

Class-Interval	Cumulative Frequency
27 - 33	9
33 - 39	14
39 - 45	20
45 - 51	28
51 - 57	41
57 - 63	53
63 - 69	68
69 - 75	79

- (i) 

Class-Interval	27 - 33	33 - 39	39 - 45	45 - 51	51 - 57	57 - 63	63 - 69	69 - 75
Frequency	9	5	6	8	10	12	15	11
- (ii) 

Class-Interval	27 - 33	33 - 39	39 - 45	45 - 51	51 - 57	57 - 63	63 - 69	69 - 75
Frequency	9	11	6	8	13	12	15	5
- (iii) 

Class-Interval	27 - 33	33 - 39	39 - 45	45 - 51	51 - 57	57 - 63	63 - 69	69 - 75
Frequency	9	5	6	8	13	12	15	11
- (iv) 

Class-Interval	27 - 33	33 - 39	39 - 45	45 - 51	51 - 57	57 - 63	63 - 69	69 - 75
Frequency	9	5	8	6	13	12	15	11
- (v) 

Class-Interval	27 - 33	33 - 39	39 - 45	45 - 51	51 - 57	57 - 63	63 - 69	69 - 75
Frequency	9	5	1	8	13	12	15	11

The following cumulative frequency table represents which of the following frequency distribution

12.

Class-Interval	Cumulative Frequency
29 - 36	80
36 - 43	66
43 - 50	60
50 - 57	49
57 - 64	33
64 - 71	21
71 - 78	8

- (i) 

Class-Interval	29 - 36	36 - 43	43 - 50	50 - 57	57 - 64	64 - 71	71 - 78
Frequency	14	11	6	16	12	13	8
- (ii) 

Class-Interval	29 - 36	36 - 43	43 - 50	50 - 57	57 - 64	64 - 71	71 - 78
Frequency	14	6	11	14	12	13	8
- (iii) 

Class-Interval	29 - 36	36 - 43	43 - 50	50 - 57	57 - 64	64 - 71	71 - 78
Frequency	14	6	11	16	12	13	8
- (iv) 

Class-Interval	29 - 36	36 - 43	43 - 50	50 - 57	57 - 64	64 - 71	71 - 78
Frequency	14	8	11	16	12	13	6
- (v) 

Class-Interval	29 - 36	36 - 43	43 - 50	50 - 57	57 - 64	64 - 71	71 - 78
Frequency	14	6	6	16	12	13	8

During the medical check-up of 37 students of a class, their weights in kgs are recorded as follows.

13.

Identify the number of students whose weight is less than 76 kg

Class-Interval	36 - 46	46 - 56	56 - 66	66 - 76	76 - 86
Frequency	5	12	7	8	5

- (i) 33 (ii) 31 (iii) 34 (iv) 29 (v) 32

During the medical check-up of 32 students of a class, their weights in kgs are recorded as follows.

Identify the number of students whose weight is more than 47 kg

14.

Class-Interval	31 - 39	39 - 47	47 - 55	55 - 63
Frequency	7	9	6	10

- (i) 15 (ii) 19 (iii) 16 (iv) 17 (v) 14

Identify the class interval table for the given less than cumulative frequency table

15.

Class-Interval	Cumulative Frequency
33 - 39	16
39 - 45	26
45 - 51	39
51 - 57	55
57 - 63	67
63 - 69	77
69 - 75	91

(i)

Class-Interval	33 - 39	39 - 45	45 - 51	51 - 57	57 - 63	63 - 69	69 - 75
Frequency	16	10	13	18	12	10	14

(ii)

Class-Interval	33 - 39	39 - 45	45 - 51	51 - 57	57 - 63	63 - 69	69 - 75
Frequency	16	14	13	16	12	10	10

(iii)

Class-Interval	33 - 39	39 - 45	45 - 51	51 - 57	57 - 63	63 - 69	69 - 75
Frequency	16	13	10	16	12	10	14

(iv)

Class-Interval	33 - 39	39 - 45	45 - 51	51 - 57	57 - 63	63 - 69	69 - 75
Frequency	16	10	13	16	12	10	14

(v)

Class-Interval	33 - 39	39 - 45	45 - 51	51 - 57	57 - 63	63 - 69	69 - 75
Frequency	16	10	17	16	12	10	14

Identify the class interval table for the given greater than cumulative frequency table

16.

Class-Interval	Cumulative Frequency
16 - 22	64
22 - 28	52
28 - 34	39
34 - 40	24
40 - 46	14
46 - 52	5

(i)

Class-Interval	16 - 22	22 - 28	28 - 34	34 - 40	40 - 46	46 - 52
Frequency	12	15	13	10	9	5

(ii)

Class-Interval	16 - 22	22 - 28	28 - 34	34 - 40	40 - 46	46 - 52
Frequency	12	13	15	6	9	5

(iii)

Class-Interval	16 - 22	22 - 28	28 - 34	34 - 40	40 - 46	46 - 52
Frequency	12	13	15	10	9	5

(iv)

Class-Interval	16 - 22	22 - 28	28 - 34	34 - 40	40 - 46	46 - 52
Frequency	12	5	15	10	9	13

(v)

Class-Interval	16 - 22	22 - 28	28 - 34	34 - 40	40 - 46	46 - 52
Frequency	12	13	13	10	9	5

## Assignment Key

1) (ii)	2) (ii)	3) (i)	4) (iv)	5) (v)	6) (i)
7) (i)	8) (iii)	9) (ii)	10) (i)	11) (iii)	12) (iii)
13) (v)	14) (iii)	15) (iv)	16) (iii)		