

CMPT 371 JC Liu Project 1 Question 2

My output is the terminal window on the right. The answer is the terminal window on the left.

Test case 1:

```
0
0 1 1
1 2 2
2 4 6
1
0 2 2
1 3 6
2 5 6
```

```
0
0 1 1
1 2 2
2 4 6
1
0 2 2
1 3 6
2 5 6
```

Test case 2:

Two terminal windows are shown side-by-side. The left window, titled '2.ans', displays a sequence of input lines for a program. The right window, titled '2.out', displays the corresponding output lines. The input and output sequences are identical, showing a repeating pattern of numbers and their sums.

Test case 3:

```
3.ans 3.out
8
0 9 9
1 10 10
2 12 12
3 0 2
2
0 3 4
1 4 4
2 6 6
3 10 10
14
0 15 2
1 0 2
2 2 2
3 6 6
10
0 11 11
1 12 12
2 14 14
3 2 2
2
0 3 4
1 4 4
2 6 6
3 10 10
12
0 13 14
1 14 14
2 0 2
3 4 4

2
0 3 4
1 4 4
2 6 6
3 10 10
8
0 9 9
1 10 10
2 12 12
3 0 2
2
0 3 4
1 4 4
2 6 6
3 10 10
2
0 3 4
1 4 4
2 6 6
3 10 10
4
0 5 5
1 6 6
2 8 8
3 12 12
14
0 15 2
1 0 2
2 2 2
3 6 6
```

Test case 4:

```
4.ans
1
0 2 0
1 3 0

4.out
1
0 2 0
1 3 0
```

Test case 5:

```
5.ans
11
0 12 12
1 13 1
2 15 1
3 3 3
1
0 2 2
1 3 3
2 5 8
3 9 11
8
0 9 11
1 10 11
2 12 12
3 0 1
2
0 3 3
1 4 4
2 6 8
3 10 11
1
0 2 2
1 3 3
2 5 8
3 9 11
1
0 2 2
1 3 3
2 5 8
3 9 11

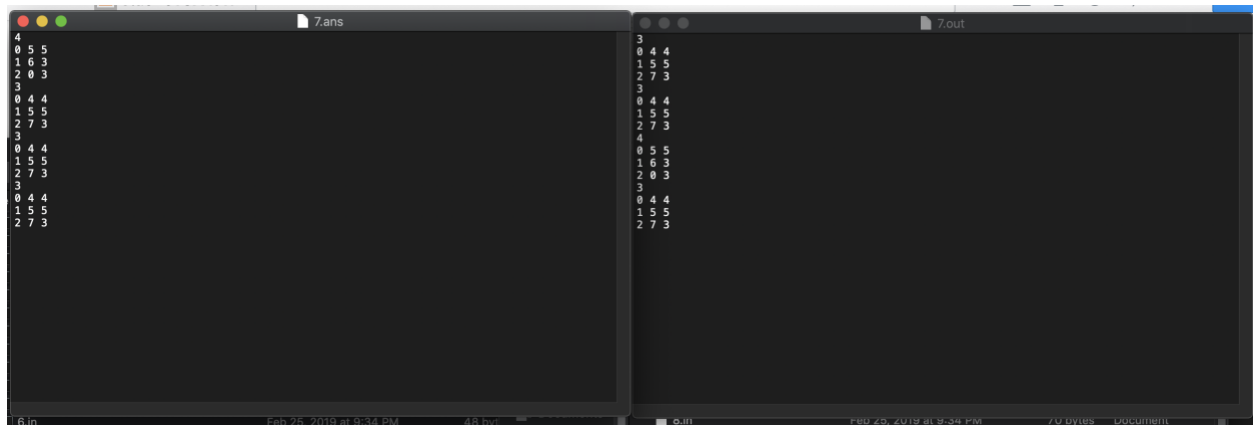
5.out
1
0 2 2
1 3 3
2 5 8
3 9 11
11
0 12 12
1 13 1
2 15 1
3 3 3
1
0 2 2
1 3 3
2 5 8
3 9 11
3
0 4 4
1 5 8
2 7 8
3 11 11
4
0 5 8
1 6 8
2 8 8
3 12 12
2
0 3 3
1 4 4
2 6 8
3 10 11
```

Test case 6:

```
6.ans
11
0 12 13
1 13 13
2 15 0
3 3 3
9
0 10 10
1 11 11
2 13 13
3 1 3
10
0 11 11
1 12 13
2 14 0
3 2 3
9
0 10 10
1 11 11
2 13 13
3 1 3

6.out
11
0 12 13
1 13 13
2 15 0
3 3 3
9
0 10 10
1 11 11
2 13 13
3 1 3
10
0 11 11
1 12 13
2 14 0
3 2 3
9
0 10 10
1 11 11
2 13 13
3 1 3
```

Test case 7:



The screenshot shows two side-by-side terminal windows. The left window, titled '7.ans', contains the following text:

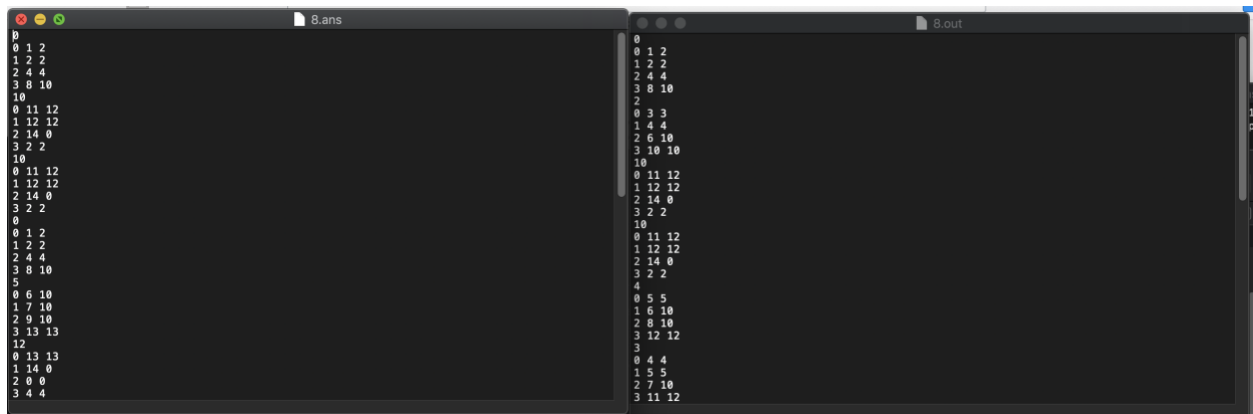
```
4
0 5 5
1 6 3
2 0 3
3
0 4 4
1 5 5
2 7 3
3
0 4 4
1 5 5
2 7 3
3
0 4 4
1 5 5
2 7 3
```

The right window, titled '7.out', contains the following text:

```
3
0 4 4
1 5 5
2 7 3
3
0 4 4
1 5 5
2 7 3
4
0 5 5
1 6 3
2 0 3
3
0 4 4
1 5 5
2 7 3
```

At the bottom of the windows, status bars indicate file sizes: '6 in' and '48 bytes' for the left, and '0 in' and '70 bytes' for the right.

Test case 8:



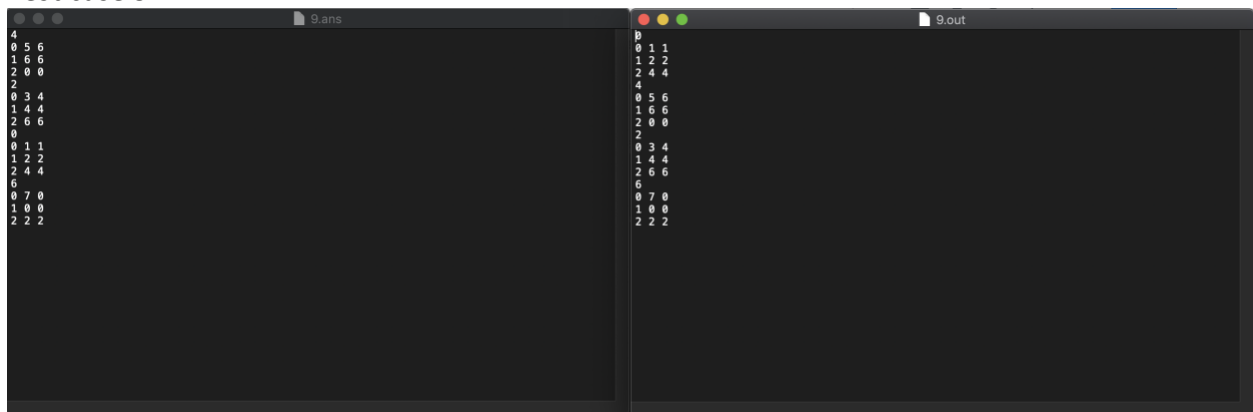
The screenshot shows two side-by-side terminal windows. The left window, titled '8.ans', contains the following text:

```
0
0 1 2
1 2 2
2 4 4
3 8 10
10
0 11 12
1 12 12
2 14 0
3 2 2
10
0 11 12
1 12 12
2 14 0
3 2 2
0
0 1 2
1 2 2
2 4 4
3 8 10
5
0 6 10
1 7 10
2 9 10
3 13 13
12
0 13 13
1 14 0
2 0 0
3 4 4
```

The right window, titled '8.out', contains the following text:

```
0
0 1 2
1 2 2
2 4 4
3 8 10
2
0 3 3
1 4 4
2 6 10
3 10 10
10
0 11 12
1 12 12
2 14 0
3 2 2
10
0 11 12
1 12 12
2 14 0
3 2 2
4
0 5 5
1 6 10
2 8 10
3 12 12
3
0 4 4
1 5 5
2 7 10
3 11 12
```

Test case 9:



The screenshot shows two side-by-side terminal windows. The left window, titled '9.ans', contains the following text:

```
4
0 5 6
1 6 6
2 0 0
2
0 3 4
1 4 4
2 6 6
0
0 1 1
1 2 2
2 4 4
6
0 7 0
1 0 0
2 2 2
```

The right window, titled '9.out', contains the following text:

```
0
0 1 1
1 2 2
2 4 4
4
0 5 6
1 6 6
2 0 0
2
0 3 4
1 4 4
2 6 6
6
0 7 0
1 0 0
2 2 2
```

Test case 10:

```
10.ans 10.out
5
0 6 6
1 7 8
2 9 9
3 13 14
4
0 5 5
1 6 6
2 8 8
3 12 12
11
0 12 12
1 13 14
2 15 0
3 3 4
2
0 3 4
1 4 4
2 6 6
3 10 10
6
0 7 8
1 8 8
2 10 10
3 14 14
12
0 13 14
1 14 14
2 0 0
3 4 4
5
0 6 6
1 7 8
2 9 9
3 13 14
4
0 2 2
1 3 4
2 5 5
3 9 9
4
0 5 5
1 6 6
2 8 8
3 12 12
2
0 3 4
1 4 4
2 6 6
3 10 10
11
0 12 12
1 13 14
2 15 0
3 3 4
4
0 5 5
1 6 6
2 8 8
3 12 12
```

Test case 11:

```
11.ans 11.out
201
0 202 205
1 203 205
2 205 205
3 209 209
4 217 217
5 233 233
6 9 9
7 73 73
168
0 169 170
1 170 170
2 172 172
3 176 176
4 184 185
5 200 201
6 232 232
7 40 40
79
0 80 80
1 81 82
2 83 83
3 87 87
4 95 95
5 111 111
6 143 143
7 207 207
231
0 232 232
1 233 233
201
0 202 205
1 203 205
2 205 205
3 209 209
4 217 217
5 233 233
6 9 9
7 73 73
0 10 10
1 11 11
2 13 13
3 17 17
4 25 25
5 41 42
6 73 73
7 137 137
168
0 169 170
1 170 170
2 172 172
3 176 176
4 184 185
5 200 201
6 232 232
7 40 40
79
0 80 80
1 81 87
```

Test case 12:

```
12.ans 12.out
381
0 382 382
1 383 383
2 385 386
3 389 392
4 397 400
5 413 419
6 445 446
7 509 0
8 125 126
430
0 431 432
1 432 432
2 434 435
3 438 439
4 446 446
5 462 464
6 494 496
7 46 49
8 174 174
505
0 506 506
1 507 0
2 509 0
3 1 1
4 9 12
5 25 26
6 57 60
7 121 123
8 249 250
381
0 382 382
1 383 383
2 385 386
3 389 392
4 397 400
5 413 419
6 445 446
7 509 0
8 125 126
430
0 431 432
1 432 432
2 434 435
3 438 439
4 446 446
5 462 464
6 494 496
7 46 49
8 174 174
505
0 506 506
1 507 0
2 509 0
3 1 1
4 9 12
5 25 26
6 57 60
7 121 123
8 249 250
```

Test case 13:

```
13.ans
6
0 7 7
1 8 8
2 10 10
3 14 14
4 22 23
28
0 29 29
1 30 30
2 0 0
3 4 4
4 12 12
12
0 13 14
1 14 14
2 16 18
3 20 20
4 28 28
30
0 31 0
1 0 0
2 2 2
3 6 6
4 14 14
8
0 9 9
1 10 10
2 12 12
3 16 18
4 24 24

13.out
0
0 1 1
1 2 2
2 4 4
3 8 8
4 16 18
6
0 7 7
1 8 8
2 10 10
3 14 14
4 22 23
1
0 2 2
1 3 3
2 5 6
3 9 9
4 17 18
3
0 4 4
1 5 6
2 7 7
3 11 11
4 19 19
4
0 5 6
1 6 6
2 8 8
3 12 12
4 20 20
```

Test case 14:

```
14.ans
69
0 70 73
1 71 73
2 73 73
3 77 78
4 85 85
5 101 104
6 5 6
117
0 118 119
1 119 119
2 121 122
3 125 125
4 5 6
5 21 22
6 53 53
36
0 37 38
1 38 38
2 40 40
3 44 48
4 52 53
5 68 68
6 100 104
88
0 89 89
1 90 90
2 92 92
3 96 96
4 104 104

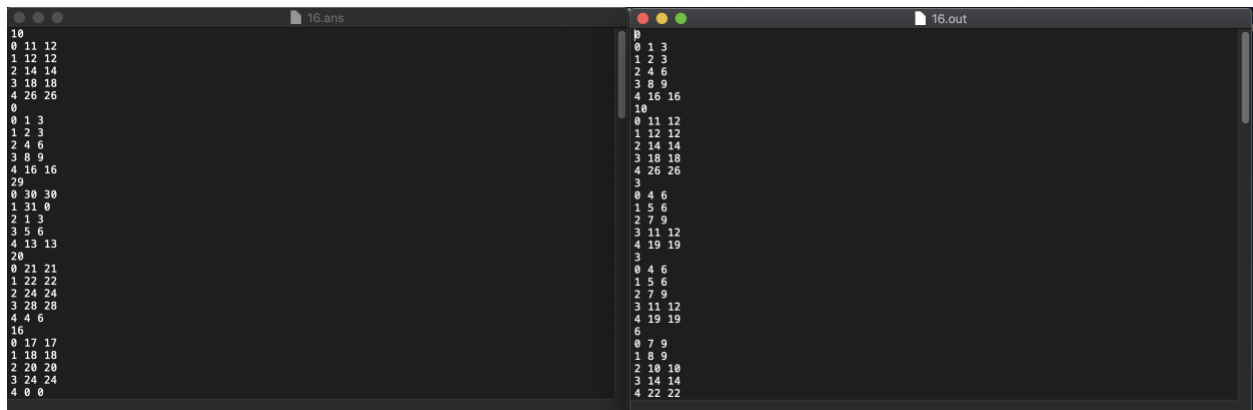
14.out
2
0 3 6
1 4 6
2 6 6
3 10 11
4 18 19
5 34 36
6 66 66
2
0 3 6
1 4 6
2 6 6
3 10 11
4 18 19
5 34 36
6 66 66
69
0 70 73
1 71 73
2 73 73
3 77 78
4 85 85
5 101 104
6 5 6
117
0 118 119
1 119 119
2 121 122
3 125 125
4 5 6
```

Test case 15:

```
15.ans
98
0 99 99
1 100 100
2 102 102
3 106 106
4 114 114
5 2 2
6 34 35
62
0 63 63
1 64 64
2 66 66
3 70 70
4 78 78
5 94 96
6 126 126
52
0 53 53
1 54 54
2 56 56
3 60 60
4 68 68
5 84 84
6 116 116
89
0 90 93
1 91 93
2 93 93
3 97 97
4 105 106

15.out
0
0 1 1
1 2 2
2 4 6
3 8 8
4 16 16
5 32 32
6 64 64
98
0 99 99
1 100 100
2 102 102
3 106 106
4 114 114
5 2 2
6 34 35
2
0 3 3
1 4 6
2 6 6
3 10 10
4 18 19
5 34 35
6 66 66
62
0 63 63
1 64 64
2 66 66
3 70 70
4 78 78
```

Test case 16:

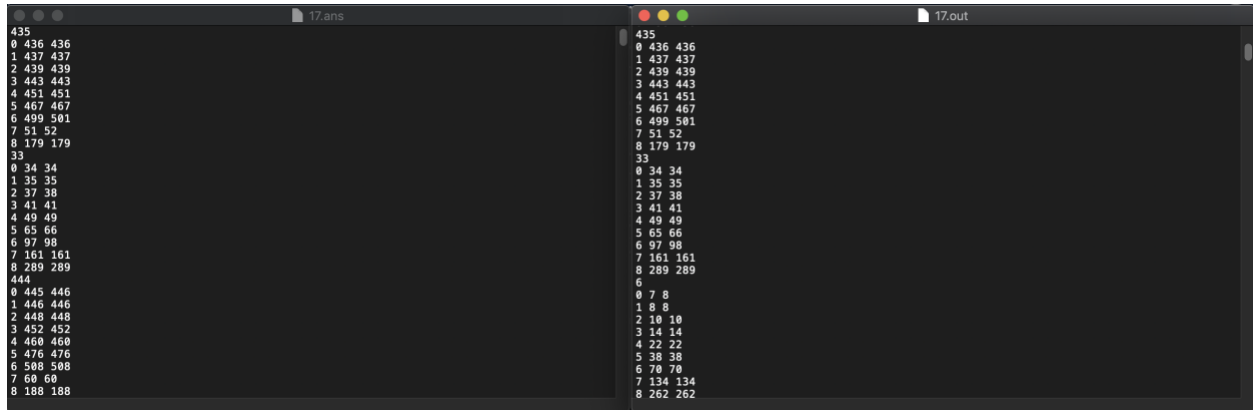


The image shows a terminal window with two panes. The left pane, titled '16.ans', contains the input for test case 16. The right pane, titled '16.out', contains the corresponding output. The input is a sequence of numbers grouped by lines, and the output is a sequence of numbers grouped by lines, matching the input format.

```
16.ans
10
0 11 12
1 12 12
2 14 14
3 18 18
4 26 26
0
0 1 3
1 2 3
2 4 6
3 8 9
4 16 16
29
0 30 30
1 31 0
2 1 3
3 5 6
4 13 13
20
0 21 21
1 22 22
2 24 24
3 28 28
4 4 6
16
0 17 17
1 18 18
2 20 20
3 24 24
4 0 0

16.out
0
0 1 3
1 2 3
2 4 6
3 8 9
4 16 16
10
0 11 12
1 12 12
2 14 14
3 18 18
4 26 26
3
0 4 6
1 5 6
2 7 9
3 11 12
4 19 19
3
0 4 6
1 5 6
2 7 9
3 11 12
4 19 19
6
0 7 9
1 8 9
2 10 10
3 14 14
4 22 22
```

Test case 17:

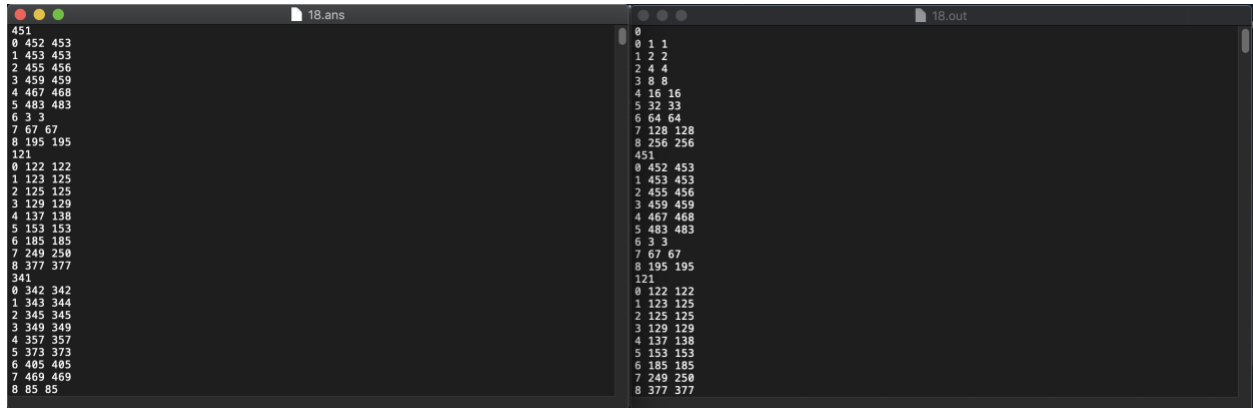


The image shows a terminal window with two panes. The left pane, titled '17.ans', contains the input for test case 17. The right pane, titled '17.out', contains the corresponding output. The input is a sequence of numbers grouped by lines, and the output is a sequence of numbers grouped by lines, matching the input format.

```
17.ans
435
0 436 436
1 437 437
2 439 439
3 443 443
4 451 451
5 467 467
6 499 501
7 51 52
8 179 179
33
0 34 34
1 35 35
2 37 38
3 41 41
4 49 49
5 65 66
6 97 98
7 161 161
8 289 289
444
0 445 446
1 446 446
2 448 448
3 452 452
4 460 460
5 476 476
6 508 508
7 60 60
8 188 188

17.out
435
0 436 436
1 437 437
2 439 439
3 443 443
4 451 451
5 467 467
6 499 501
7 51 52
8 179 179
33
0 34 34
1 35 35
2 37 38
3 41 41
4 49 49
5 65 66
6 97 98
7 161 161
8 289 289
6
0 7 8
1 8 8
2 10 10
3 14 14
4 22 22
5 38 38
6 70 70
7 134 134
8 262 262
```

Test case 18:

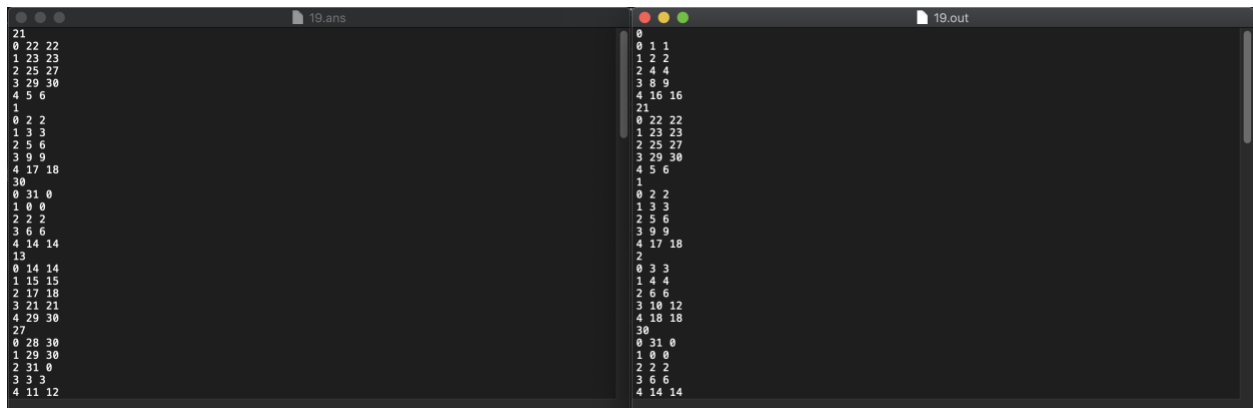


The image shows a terminal window with two panes. The left pane, titled '18.ans', contains the input for test case 18. The right pane, titled '18.out', contains the corresponding output. The input is a sequence of numbers grouped by lines, and the output is a sequence of numbers grouped by lines, matching the input format.

```
18.ans
451
0 452 453
1 453 453
2 455 456
3 459 459
4 467 468
5 483 483
6 3 3
7 67 67
8 195 195
121
0 122 122
1 123 125
2 125 125
3 129 129
4 137 138
5 153 153
6 185 185
7 249 250
8 377 377
341
0 342 342
1 343 344
2 345 345
3 349 349
4 357 357
5 373 373
6 405 405
7 469 469
8 85 85

18.out
0
0 1 1
1 2 2
2 4 4
3 8 8
4 16 16
5 32 33
6 64 64
7 128 128
8 256 256
451
0 452 453
1 453 453
2 455 456
3 459 459
4 467 468
5 483 483
6 3 3
7 67 67
8 195 195
121
0 122 122
1 123 125
2 125 125
3 129 129
4 137 138
5 153 153
6 185 185
7 249 250
8 377 377
```

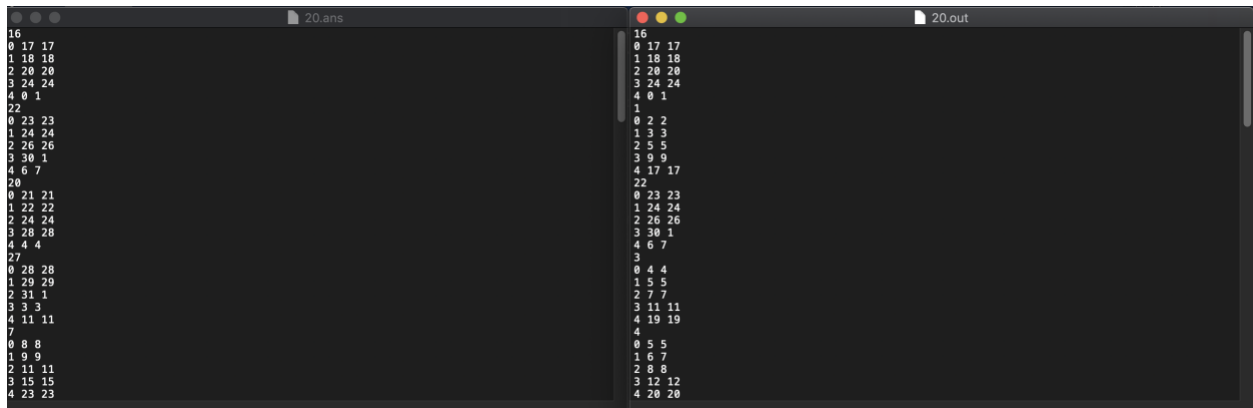
Test case 19:



```
21
0 22 22
1 23 23
2 25 27
3 29 30
4 5 6
1
0 2 2
1 3 3
2 5 6
3 9 9
4 17 18
30
0 31 0
1 0 0
2 2 2
3 6 6
4 14 14
13
0 14 14
1 15 15
2 17 18
3 21 21
4 29 30
27
0 28 30
1 29 30
2 31 0
3 3 3
4 11 12

0
0 1 1
1 2 2
2 4 4
3 8 9
4 16 16
21
0 22 22
1 23 23
2 25 27
3 29 30
4 5 6
1
0 2 2
1 3 3
2 5 6
3 9 9
4 17 18
2
0 3 3
1 4 4
2 6 6
3 10 12
4 18 18
30
0 31 0
1 0 0
2 2 2
3 6 6
4 14 14
```

Test case 20:



```
16
0 17 17
1 18 18
2 20 20
3 24 24
4 0 1
22
0 23 23
1 24 24
2 26 26
3 30 1
4 0 7
20
0 21 21
1 22 22
2 24 24
3 28 28
4 4 4
27
0 28 28
1 29 29
2 31 1
3 3 3
4 11 11
7
0 8 8
1 9 9
2 11 11
3 15 15
4 23 23

16
0 17 17
1 18 18
2 20 20
3 24 24
4 0 1
1
0 2 2
1 3 3
2 5 5
3 9 9
4 17 17
22
0 23 23
1 24 24
2 26 26
3 30 1
4 6 7
3
0 4 4
1 5 5
2 7 7
3 11 11
4 19 19
4
0 5 5
1 6 7
2 8 8
3 12 12
4 20 20
```