

Test case 1 –Mean output

Input matrix 8*8

```
file - Notepad
File Edit Format View Help
1.5 2.5 4 55 6 7 8 9
2 3 4 5 11 12.5 3.2 1
1 2 3 4 5 6 7 8
11 12 13 14.5 15 16 7 8
22 11.5 13.4 25.1 5 6 7 8
1 2 3 4 5 6 7 8
7 3 12.5 4.1 1 2 3 8
55 11 125.1 3 8 4 6 1
```

Level 1 output

```
The size of the matrix is a square of type = 8
Please choose the level (1,2,3,...)
1
Maximum Level can be generated is: 4
Valid Level
Please choose (1) for Mean or (2) for Median
1
```

```
out - Notepad
File Edit Format View Help
1.50 2.50 4.00 55.00 6.00 7.00 8.00 9.00
2.00 3.00 4.00 5.00 11.00 12.50 3.20 1.00
1.00 2.00 3.00 4.00 5.00 6.00 7.00 8.00
11.00 12.00 13.00 14.50 15.00 16.00 7.00 8.00
22.00 11.50 13.40 25.10 5.00 6.00 7.00 8.00
1.00 2.00 3.00 4.00 5.00 6.00 7.00 8.00
7.00 3.00 12.50 4.10 1.00 2.00 3.00 8.00
55.00 11.00 125.10 3.00 8.00 4.00 6.00 1.00
```

Level 2 mean output

```
***
The size of the matrix is a square of type = 8
Please choose the level (1,2,3,....)
2
Maximum Level can be generated is: 4
Valid Level
Please choose (1) for Mean or (2) for Median
1
```



out - Notepad

File Edit Format View Help

```
2.25 10.75 9.18 4.90
6.50 8.68 10.50 7.50
10.56 10.03 5.50 7.50
14.00 21.96 3.12 3.25
```

Level 3 mean output

```
out - Notepad
File Edit Format View Help
7.83 7.86
13.07 5.07
```

Level 4 mean output

```
out - Notepad
File Edit Format View Help
7.46
```


Level 5 and higher output

```
The size of the matrix is a square of type = 8
Please choose the level (1,2,3,....)
5
Maximum Level can be generated is: 4
Invalid Level, Please try again by re-running the program again
```


Test case 1 –median output

Level 2 median output


```
The size of the matrix is a square of type = 8
Please choose the level (1,2,3,...)
2
Maximum Level can be generated is: 4
Valid Level
Please choose (1) for Mean or (2) for Median
2
```

 out - Notepad
File Edit Format View Help
2.25 4.50 9.00 5.60
6.50 8.50 10.50 7.50
6.75 8.70 5.50 7.50
9.00 8.30 3.00 4.50

Level 3 median output

 out - Notepad
File Edit Format View Help
5.50 8.25
8.50 5.00

Level 4 median output

 out - Notepad
File Edit Format View Help
6.87

Level 5 or higher output

```
The size of the matrix is a square of type = 8
Please choose the level (1,2,3,...)
5
Maximum Level can be generated is: 4
Invalid Level, Please try again by re-running the program again
```

Test case 2 :

Input matrix 16*16

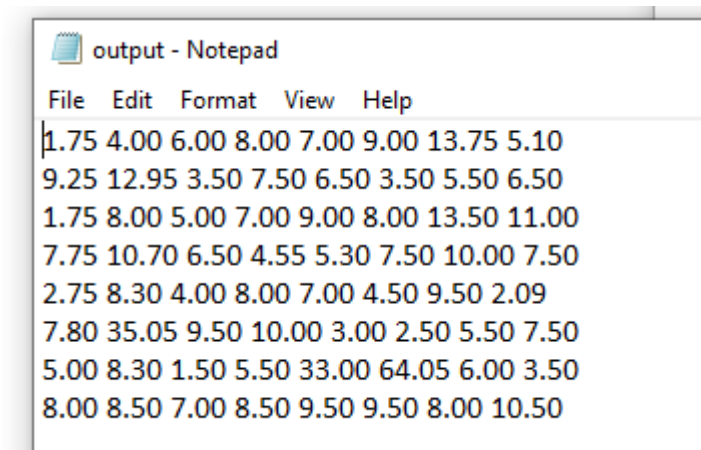
```
file - Notepad
File Edit Format View Help
1.5 2.5 4 55 6 7 8 9 2 3 4 5 11 12.5 3.2 1
1 2 3 4 5 6 7 8 11 12 13 14.5 15 16 7 8
22 11.5 13.4 25.1 5 6 7 8 1 2 3 4 5 6 7 8
7 3 12.5 4.1 1 2 3 8 55 11 125.1 3 8 4 6 1
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
1.5 11 12 13 1 5 6 7 8 9 5 0.5 17 6 7 1
2 4 5 8 9 7 1.4 2.1 8.6 12.3 11 16 15 14 12 1
22 11.5 13.4 25.1 5 6 7 8 1 2 3 4 5 6 7 8
7 3 12.5 4.1 1 2 3 8 55 11 125.1 3 8 4 6 1
1.5 2.5 4 55 6 7 8 9 2 3 4 5 11 12.5 3.2 1
4.1 1.2 45 78 13 15 17 12 9 4 1 2 3 7 9 1.3
22 11.5 13.4 25.1 5 6 7 8 1 2 3 4 5 6 7 8
7 3 12.5 4.1 1 2 3 8 55 11 125.1 3 8 4 6 1
7 3 12.5 4.1 1 2 3 8 55 11 125.1 3 8 4 6 1
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
16 14 15 13 12 8 9 10 11 7 8 1 2 3 6 4
```

1- Level 2 mean output

```
The size of the matrix is a square of type = 16
Please choose the level (1,2,3,...)
2
Maximum Level can be generated is: 5
Valid Level
Please choose (1) for Mean or (2) for Median
1
```

```
output - Notepad
File Edit Format View Help
1.75 10.25 6.00 8.00 7.00 9.18 13.56 5.20
11.68 11.26 3.50 7.00 11.62 18.38 5.12 4.75
4.93 8.00 4.62 7.00 9.00 6.43 11.00 8.87
8.31 13.96 7.12 4.66 5.63 8.00 10.25 8.50
4.12 26.32 4.00 6.50 23.37 49.66 9.56 3.15
8.75 37.71 9.62 11.75 4.75 2.50 4.87 7.41
5.00 8.29 1.50 5.50 33.00 64.05 6.00 3.50
7.87 8.37 7.12 8.50 8.62 7.00 8.00 9.87
```

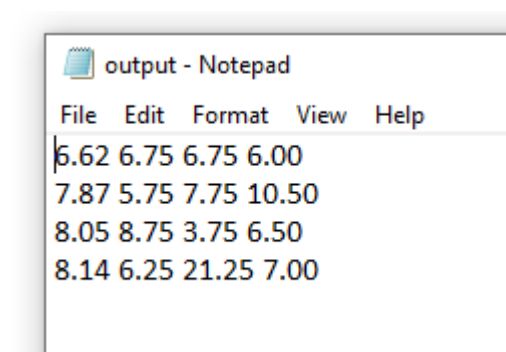
2- level 2 median output



A screenshot of a Notepad window titled "output - Notepad". The window has a menu bar with "File", "Edit", "Format", "View", and "Help". The text content consists of ten lines of numerical data, each containing ten values separated by spaces. The values are: 1.75, 4.00, 6.00, 8.00, 7.00, 9.00, 13.75, 5.10, 9.25, 12.95; 3.50, 7.50, 6.50, 3.50, 5.50, 6.50; 1.75, 8.00, 5.00, 7.00, 9.00, 8.00, 13.50, 11.00; 7.75, 10.70, 6.50, 4.55, 5.30, 7.50, 10.00, 7.50; 2.75, 8.30, 4.00, 8.00, 7.00, 4.50, 9.50, 2.09; 7.80, 35.05, 9.50, 10.00, 3.00, 2.50, 5.50, 7.50; 5.00, 8.30, 1.50, 5.50, 33.00, 64.05, 6.00, 3.50; 8.00, 8.50, 7.00, 8.50, 9.50, 9.50, 8.00, 10.50.

```
output - Notepad
File Edit Format View Help
1.75 4.00 6.00 8.00 7.00 9.00 13.75 5.10
9.25 12.95 3.50 7.50 6.50 3.50 5.50 6.50
1.75 8.00 5.00 7.00 9.00 8.00 13.50 11.00
7.75 10.70 6.50 4.55 5.30 7.50 10.00 7.50
2.75 8.30 4.00 8.00 7.00 4.50 9.50 2.09
7.80 35.05 9.50 10.00 3.00 2.50 5.50 7.50
5.00 8.30 1.50 5.50 33.00 64.05 6.00 3.50
8.00 8.50 7.00 8.50 9.50 9.50 8.00 10.50
```

3- level 3 median output



A screenshot of a Notepad window titled "output - Notepad". The window has a menu bar with "File", "Edit", "Format", "View", and "Help". The text content consists of four lines of numerical data, each containing five values separated by spaces. The values are: 6.62, 6.75, 6.75, 6.00; 7.87, 5.75, 7.75, 10.50; 8.05, 8.75, 3.75, 6.50; 8.14, 6.25, 21.25, 7.00.

```
output - Notepad
File Edit Format View Help
6.62 6.75 6.75 6.00
7.87 5.75 7.75 10.50
8.05 8.75 3.75 6.50
8.14 6.25 21.25 7.00
```