

#IN THE NAME OF ALLAH

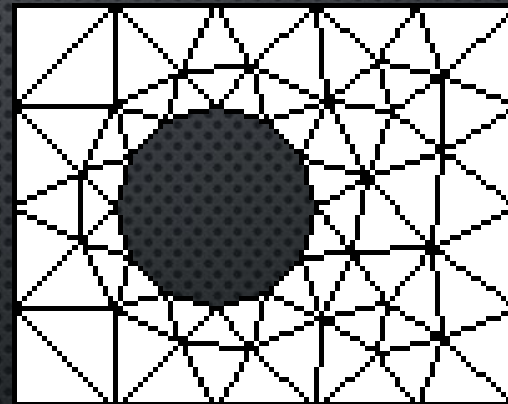
PLAY WITH EASYMESH!

CFD I

18/2/96

#EASYMESH

- A Two-Dimensional Quality Mesh Generator



- http://web.mit.edu/easymesh_v1.4/www/easymesh.html

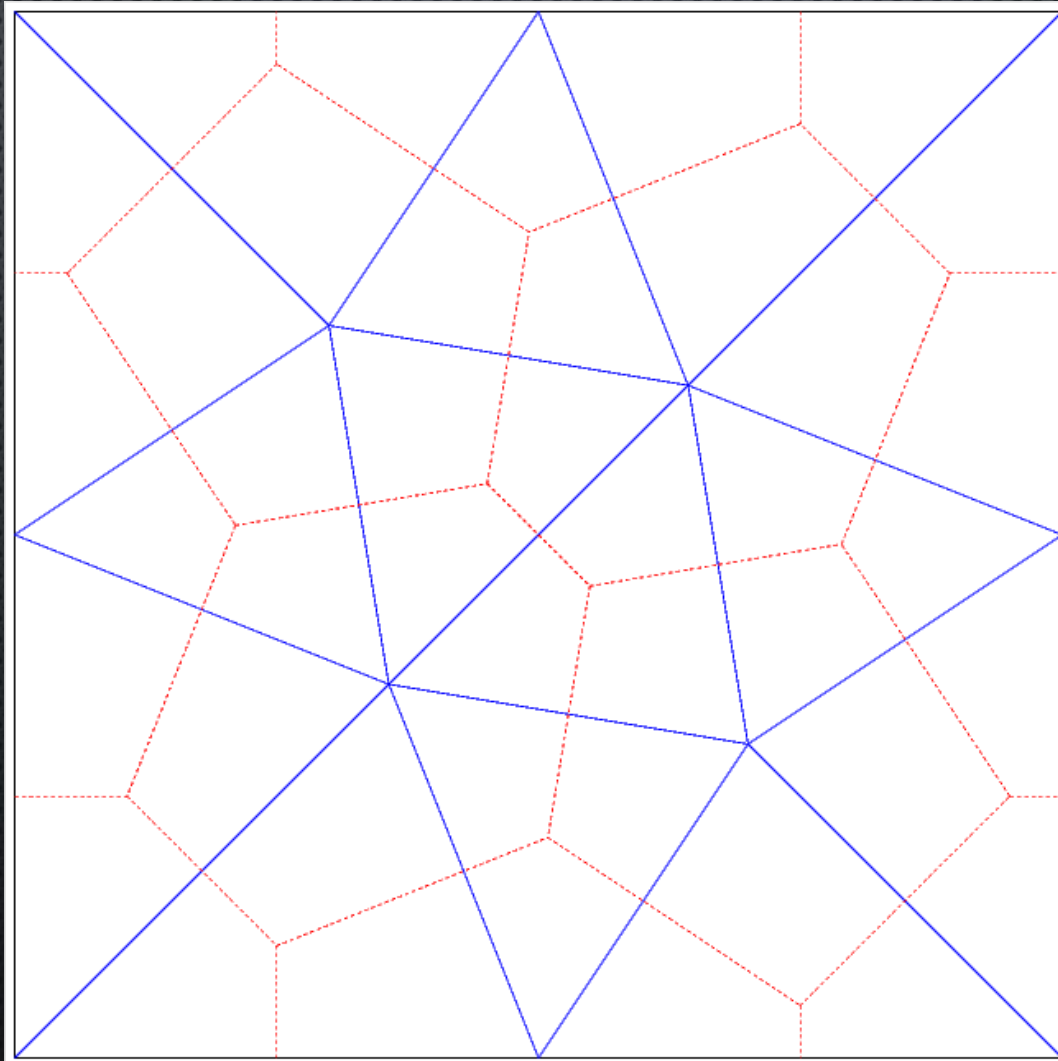
#EASYMESH

- Input file:
 - Name.d (domain file)
- Output files:
 - Name.n (Node file)
 - Name.e (Element file)
 - Name.s (Side file)

#EXAMPLE1 – INPUT FILE

```
1 *****
2   POINTS
3   *****#
4   4
5
6   0:      0.0    0.0    0.5    1
7   1:      1.0    0.0    0.5    1
8   2:      1.0    1.0    0.5    1
9   3:      0.0    1.0    0.5    1
10
11
12  *****
13  SEGMENTS
14  *****#
15  4
16
17  0:      0      1      1
18  1:      1      2      1
19  2:      2      3      1
20  3:      3      0      1
21
```

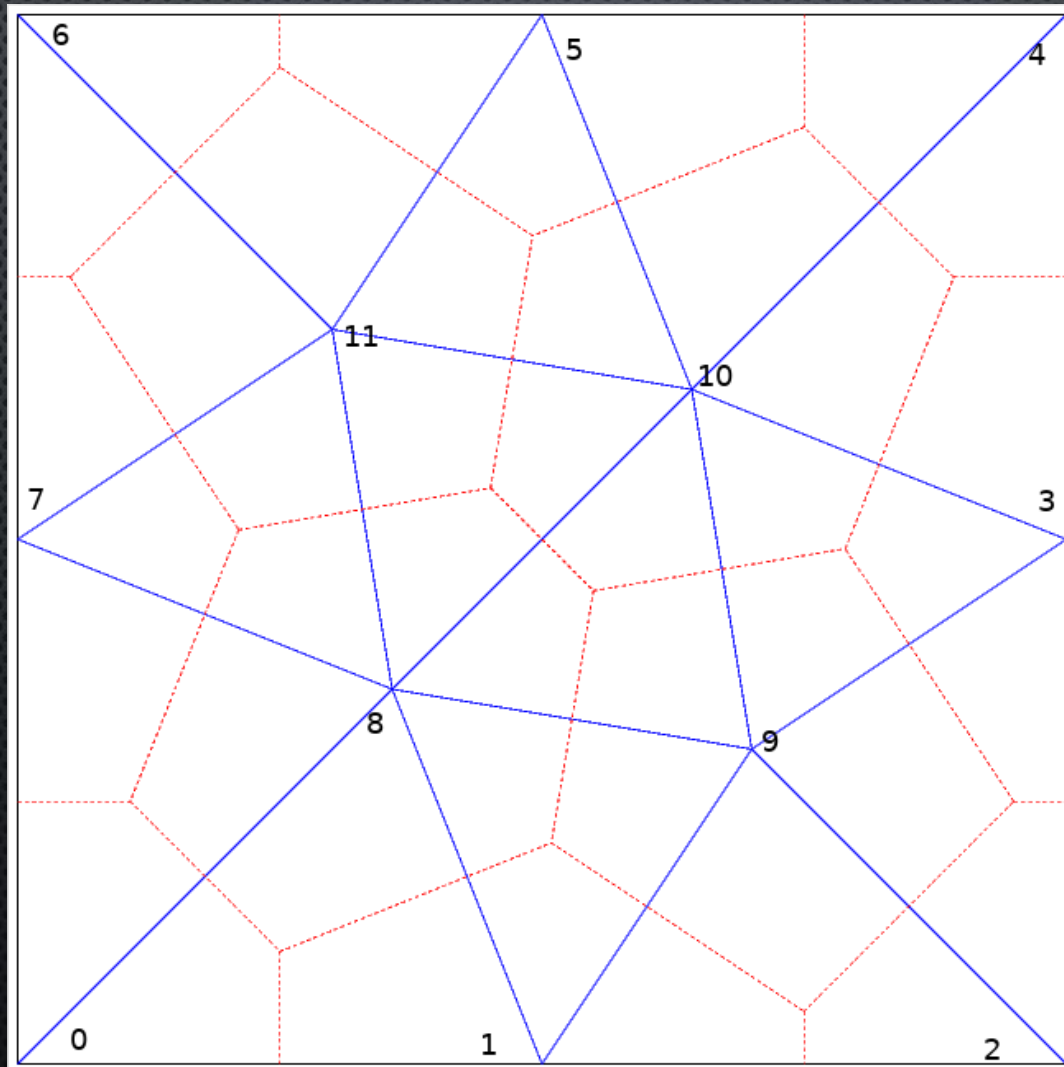
#EXAMPLE1



#EXAMPLE1 – NODE FILE(.N)

1	12			
2	0:	0.000000000000000000e+00	0.000000000000000000e+00	1
3	1:	5.000000000000000000e-01	0.000000000000000000e+00	1
4	2:	1.000000000000000000e+00	0.000000000000000000e+00	1
5	3:	1.000000000000000000e+00	5.000000000000000000e-01	1
6	4:	1.000000000000000000e+00	1.000000000000000000e+00	1
7	5:	5.000000000000000000e-01	1.000000000000000000e+00	1
8	6:	0.000000000000000000e+00	1.000000000000000000e+00	1
9	7:	0.000000000000000000e+00	5.000000000000000000e-01	1
10	8:	3.571428553709102e-01	3.571428553709102e-01	0
11	9:	7.000000000000000000e-01	3.000000000000000000e-01	0
12	10:	6.428571446290898e-01	6.428571446290898e-01	0
13	11:	3.000000000000000000e-01	7.000000000000000000e-01	0
14	-----			
15	n:	x	y	mark
16				

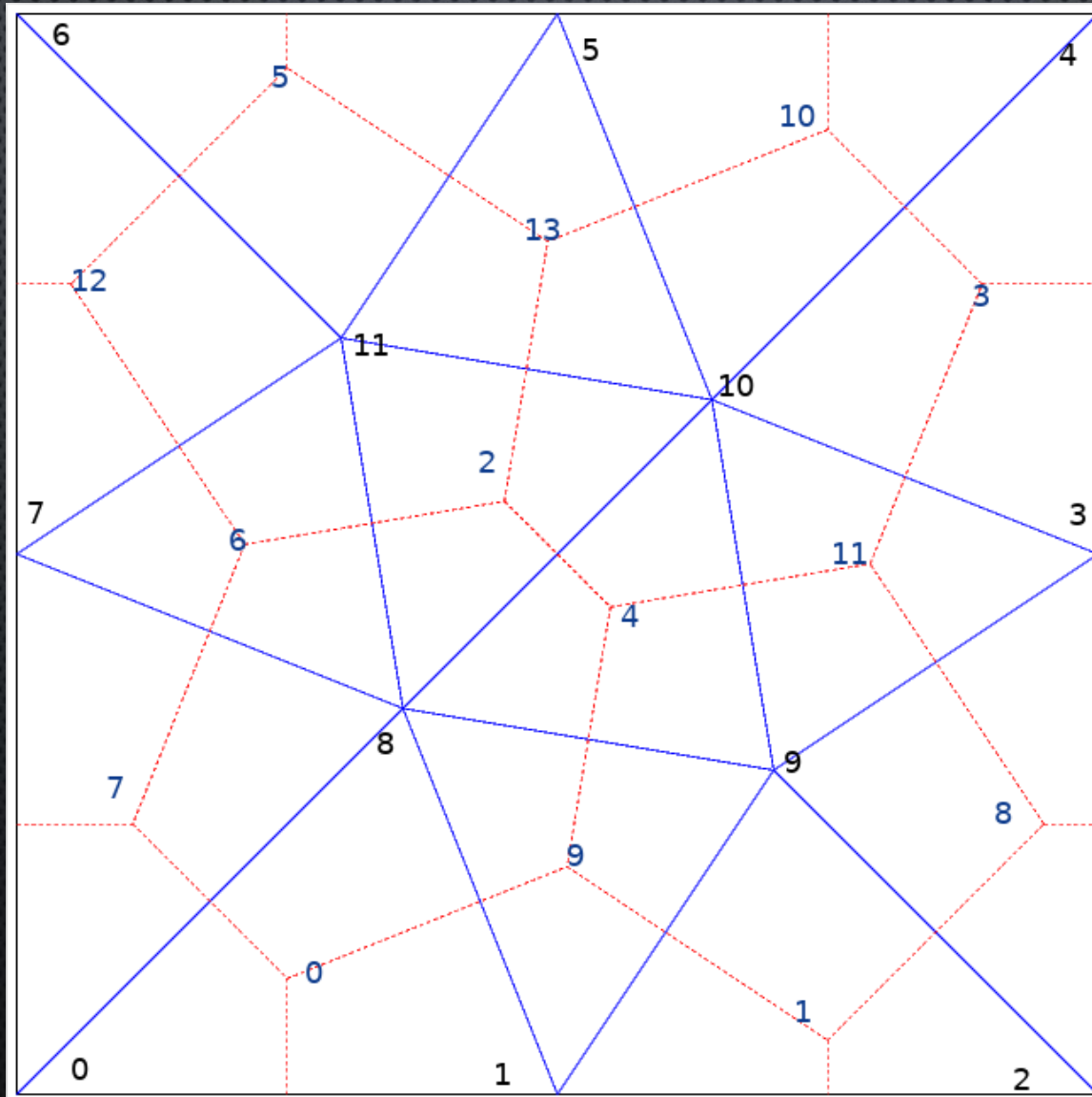
#EXAMPLE1 – NODE FILE(.N)



#EXAMPLE1 – ELEMENT FILE(.E)

```
1 14
2 0: 8 0 1 -1 9 7 2 13 15 2.5000000000000000e-01 1.071428553709102e-01 -1
3 1: 9 1 2 -1 8 9 4 16 18 7.5000000000000000e-01 5.0000000000000000e-02 -1
4 2: 10 11 8 6 4 13 0 1 8 4.510204094289418e-01 5.489795905710583e-01 -1
5 3: 10 3 4 -1 10 11 7 19 21 8.928571446290898e-01 7.5000000000000000e-01 -1
6 4: 10 8 9 9 11 2 3 5 1 5.489795905710583e-01 4.510204094289417e-01 -1
7 5: 11 5 6 -1 12 13 10 22 24 2.5000000000000000e-01 9.5000000000000000e-01 -1
8 6: 8 11 7 12 7 2 23 14 0 2.107142857308977e-01 5.089285714036534e-01 -1
9 7: 8 7 0 -1 0 6 11 15 14 1.071428553709102e-01 2.5000000000000000e-01 -1
10 8: 9 2 3 -1 11 1 6 17 16 9.5000000000000000e-01 2.5000000000000000e-01 -1
11 9: 8 1 9 1 4 0 18 3 13 5.089285714036534e-01 2.107142857308977e-01 -1
12 10: 10 4 5 -1 13 3 9 20 19 7.5000000000000000e-01 8.928571446290898e-01 -1
13 11: 9 3 10 3 4 8 21 5 17 7.892857142691023e-01 4.910714285963466e-01 -1
14 12: 11 6 7 -1 6 5 12 23 22 5.0000000000000000e-02 7.5000000000000000e-01 -1
15 13: 10 5 11 5 2 10 24 8 20 4.910714285963466e-01 7.892857142691023e-01 -1
16 -----
17 e: i, j, k, ei, ej, ek, si, sj, sk xV, yV sign
18
```

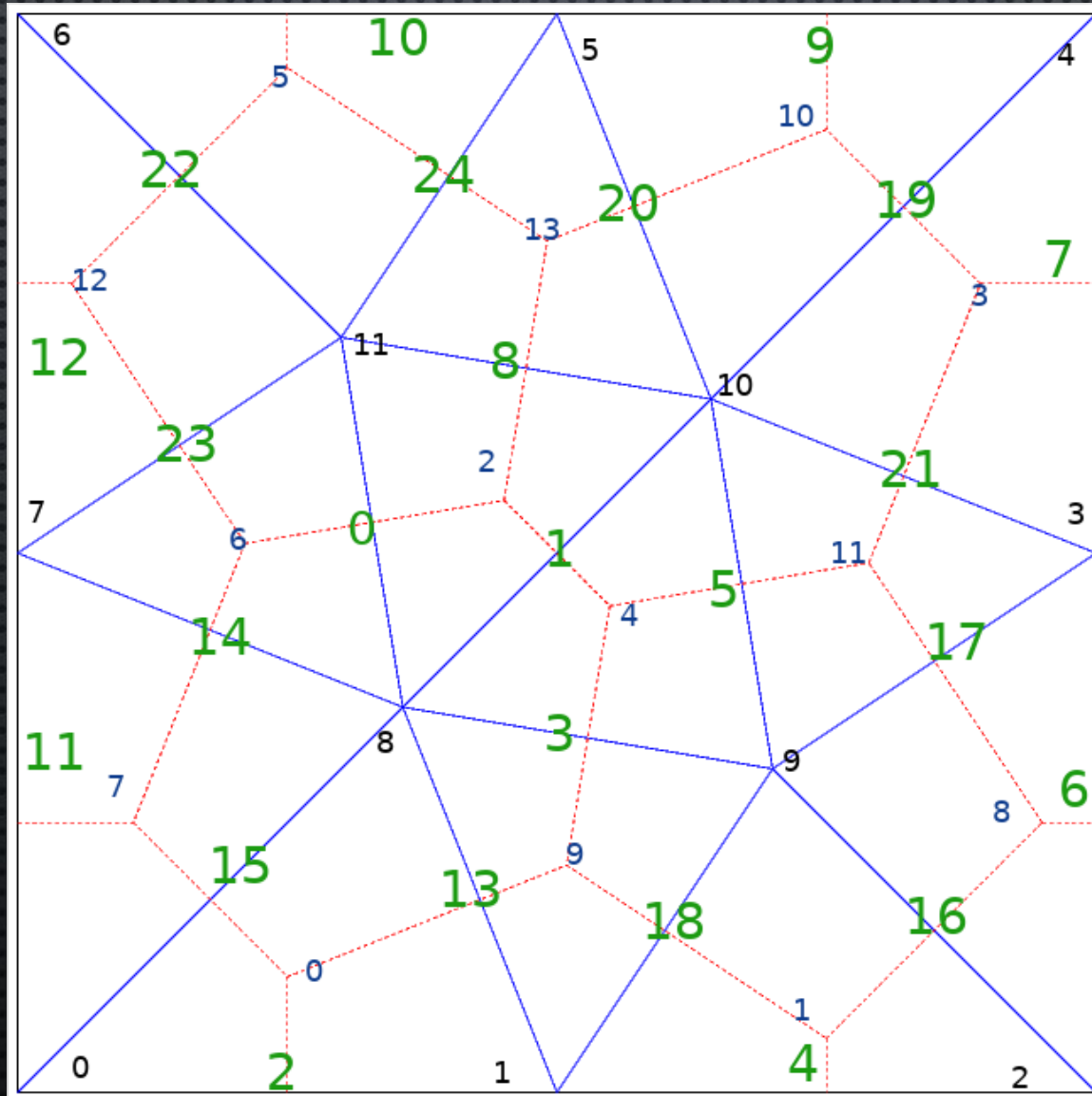

#EXAMPLE1 – ELEMENT FILE(.E)



#EXAMPLE1 – SIDE FILE(.S)

```
1 25
2 0: 8 11 6 2 0
3 1: 8 10 2 4 0
4 2: 0 1 0 -1 1
5 3: 8 9 4 9 0
6 4: 1 2 1 -1 1
7 5: 9 10 4 11 0
8 6: 2 3 8 -1 1
9 7: 3 4 3 -1 1
10 8: 10 11 2 13 0
11 9: 4 5 10 -1 1
12 10: 5 6 5 -1 1
13 11: 0 7 -1 7 1
14 12: 6 7 12 -1 1
15 13: 1 8 0 9 0
16 14: 7 8 6 7 0
17 15: 0 8 7 0 0
18 16: 2 9 1 8 0
19 17: 3 9 8 11 0
20 18: 1 9 9 1 0
21 19: 4 10 3 10 0
22 20: 5 10 10 13 0
23 21: 3 10 11 3 0
24 22: 6 11 5 12 0
25 23: 7 11 12 6 0
26 24: 5 11 13 5 0
27 -----
28 s: c d ea eb mark
29
```

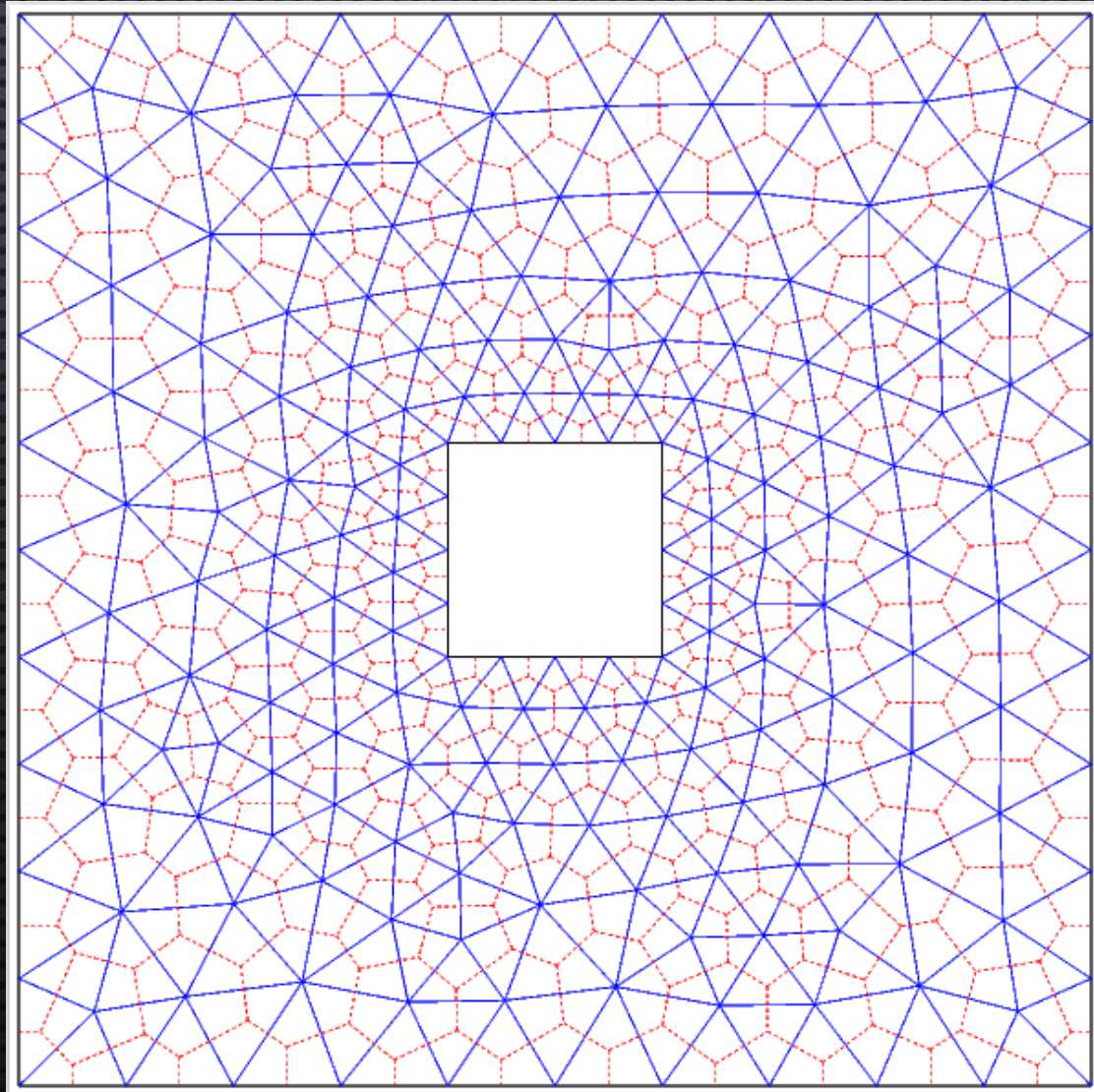
#EXAMPLE1 – SIDE FILE(.S)



#EXAMPLE2 – INPUT FILE

```
1 *****
2 POINTS
3 *****#
4 8
5
6 0: 0.0 0.0 1.0 1
7 1: 10 0.0 1.0 1
8 2: 10 10 1.0 1
9 3: 0.0 10 1.0 1
10
11 4: 4.0 4.0 0.5 1
12 5: 4.0 6.0 0.5 1
13 6: 6.0 6.0 0.5 1
14 7: 6.0 4.0 0.5 1
15
16 *****
17 SEGMENTS
18 *****#
19 8
20
21 0: 0 1 1
22 1: 1 2 1
23 2: 2 3 1
24 3: 3 0 1
25
26 4: 4 5 1
27 5: 5 6 1
28 6: 6 7 1
29 7: 7 4 1
```

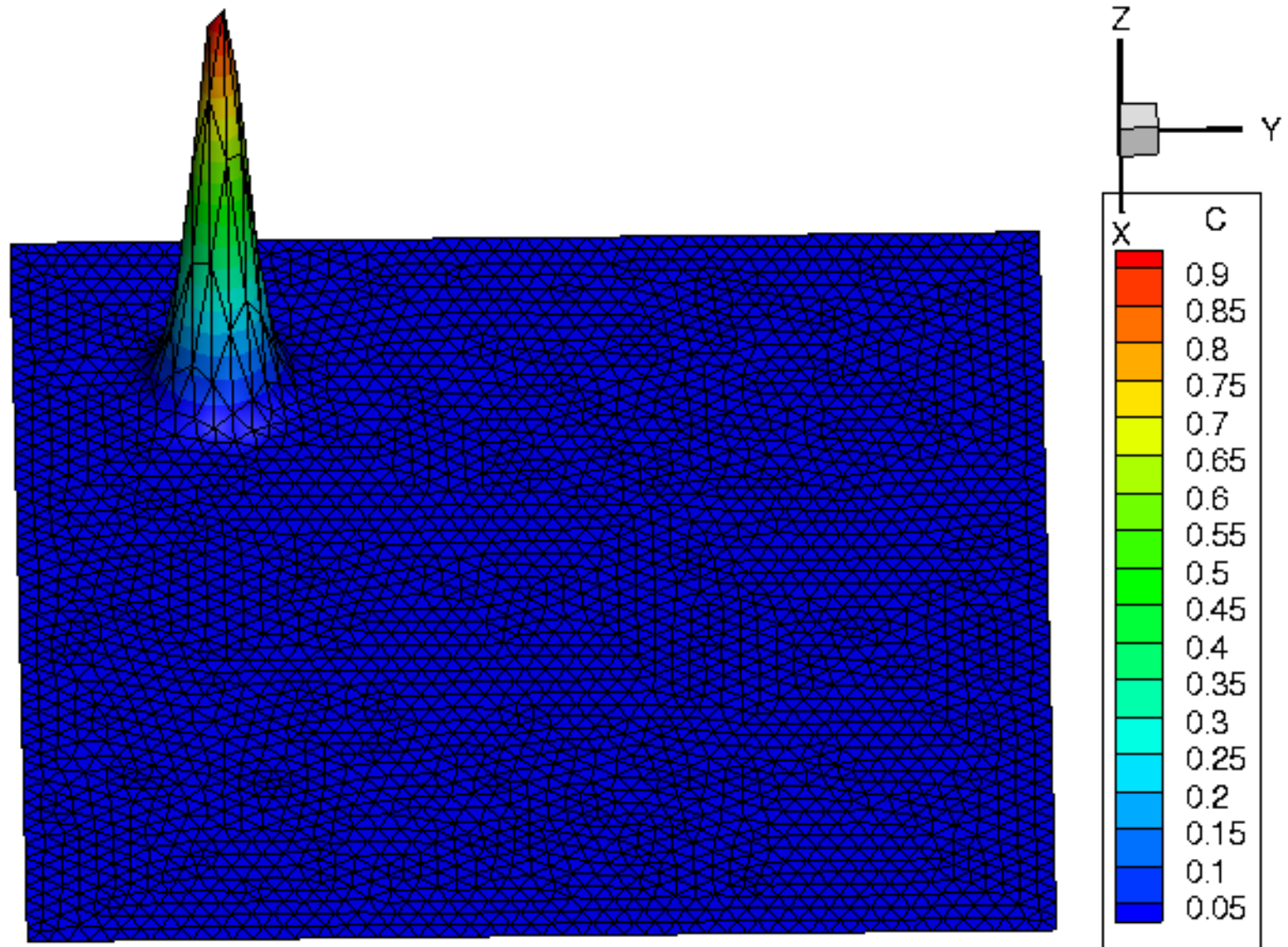
#EXAMPLE2



#EXAMPLE4 (TECPLOT)

- VARIABLES=X Y C
- ZONE T=" 0.00" N= 3132 E= 6062 F=FEPOINT ET=TRIANGLE
- 13.1588| 13.7953 0.0000
- 0.0000 0.0000 0.0000
-
- 1 2 3
- 1 4 2
-
- VARIABLES=X Y C
- ZONE T=" 12.00" N= 3132 E= 6062 F=FEPOINT ET=TRIANGLE
- 13.1588 13.7953 0.0000
-

#EXAMPLE4 (TECPLOT)



#ANY QUESTIONS?

