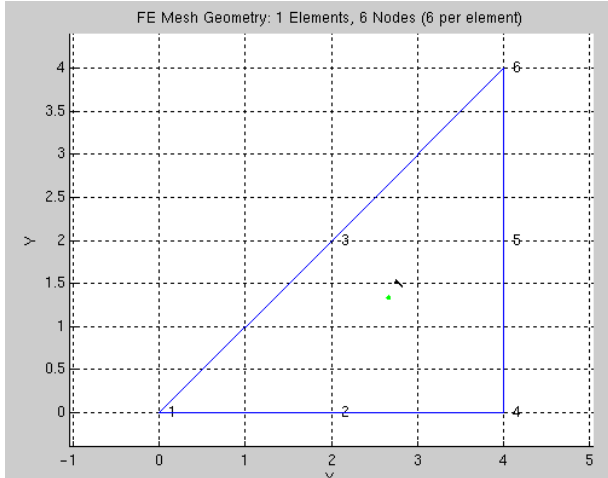


```
>> addpath /net/course-a/mech517/public_html/Matlab_Plots
>> mesh_plot
Read 6 mesh coordinate pairs Read 1 elements with 6 nodes each
```



```
>> Area_Edge_T6_Poisson
Read 6 nodes.
(Echo of file msh_bc_xyz.tmp)
bc_flag, x-, y-coordinates
0 0 0
0 2 0
0 2 2
1 4 0
1 4 2
1 4 4

(Echo of file msh_typ_nodes.tmp)
Read 1 elements with (ignored) type & 6 nodes each.
1 1 4 6 2 5 3
```

```
Applied Boundary Conditions: 3
(Echo of file load msh_ebc.tmp)
Node, DOF, Value.
4 1 5
5 1 5
6 1 5
```

```
(Echoing columns of file msh_properties.tmp)
Properties for all elements
Thermal conductivity = 8
Heat Generation per volume = 6
Thickness = 1
Mass Density = 1
```

```
Resultants of all input sources:
Node, DOF, Value
2 1 16
3 1 16
5 1 16
Totals = 48.0000
```

```
Temperature at 6 nodes
1 8.6
2 7.7
3 7.1
4 5
5 5
6 5
```

```

Recovered Reactions at BC: 3
Node, DOF, Value
4 1 -9.6
5 1 -38.4
6 1 5.00952e-08
Total = -48.0000

```

Post-processing Gradients and Reaction:

```

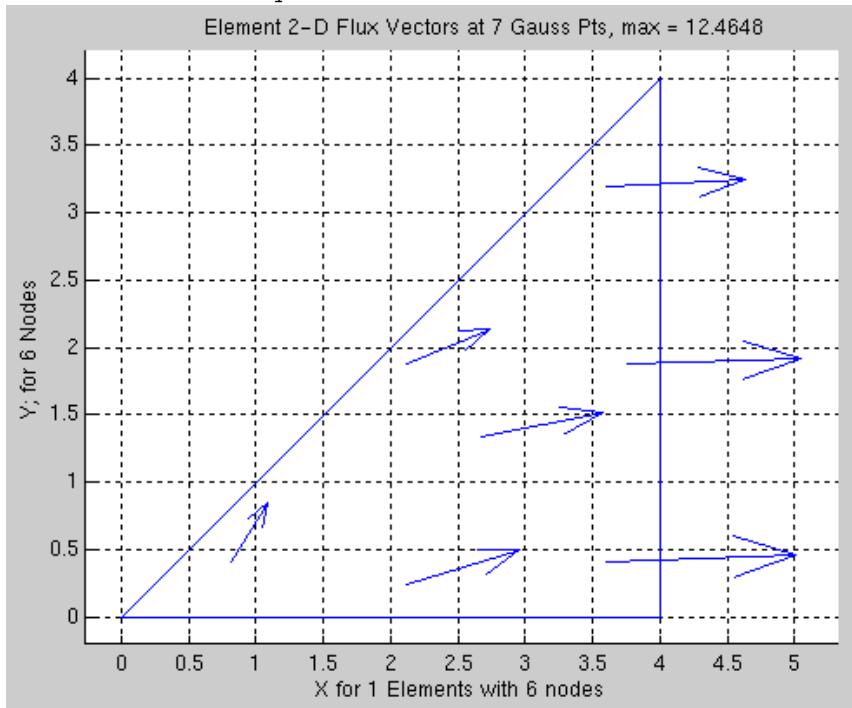
Element, Point, Coordinates      1 1  0.810292  0.405146
Element, Point, Gradient Vector  1 1 -0.30386  -0.478456
Element, Point, Heat Flux Vector 1 1  2.43088  3.82765
Element, Point, Coordinates      1 2  2.11943  0.238863
Element, Point, Gradient Vector  1 2 -0.917915 -0.282085
Element, Point, Heat Flux Vector 1 2  7.34332  2.25668
Element, Point, Coordinates      1 3  3.59485  0.405146
Element, Point, Gradient Vector  1 3 -1.55691  -0.0607719
Element, Point, Heat Flux Vector 1 3 12.4553  0.486175
Element, Point, Coordinates      1 4  3.76114  1.88057
Element, Point, Gradient Vector  1 4 -1.41043  -0.0358295
Element, Point, Heat Flux Vector 1 4 11.2834  0.286636
Element, Point, Coordinates      1 5  3.59485  3.18971
Element, Point, Gradient Vector  1 5 -1.13923  -0.0607719
Element, Point, Heat Flux Vector 1 5  9.11382  0.486175
Element, Point, Coordinates      1 6  2.11943  1.88057
Element, Point, Gradient Vector  1 6 -0.671659 -0.282085
Element, Point, Heat Flux Vector 1 6  5.37327  2.25668
Element, Point, Coordinates      1 7  2.66667  1.33333
Element, Point, Gradient Vector  1 7 -1         -0.2
Element, Point, Heat Flux Vector 1 7  8         1.6

```

```

>> quiver_qp_flux_mesh(1,1,-1)
Using a scale of 1 and vector increment of 1
Read 6 mesh coordinates In 2 spatial dimensions
Read 1 elements connections
Read 7 Gauss x & y coord & flux sets

```



```

>> quit

```