

```

70 nx.draw_networkx_edge_labels(G, pos, label_pos=0.35)
71 plt.show()
72
73
74
75 # ANALYZE GRAPH -----
76 start = int(raw_input("\nEnter a starting node: "))
77 end = int(raw_input("Enter an ending node: "))
78
79 print '\nAnalyzing graph with NetworkX'
80
81 if nx.has_path(G, start, end):
82     path = nx.dijkstra_path(G, start, end)
83     length = nx.dijkstra_path_length(G, start, end)
84
85     # RESULTS -----
86     print "\nThe shortest path is: ", path
87     print "Total weight: ", length
88
89 else:
90     print 'No path between those nodes!!!'
91
92 # Close files -----
93 print '\nClosing files'
94 the_file.close()

```

```
[ 1  8 20]
[ 3  1 10]
[ 5  3  6]
[ 5  8  5]
[ 8 13 13]]
```

```
Enter a starting node: 2
Enter an ending node: 8
```

Analyzing graph with NetworkX

```
The shortest path is: [2, 13, 5, 8]
Total weight: 12
```

Closing files

```
Process finished with exit code 0
```