

```
Script started on Mon Mar 27 19:21:47 2017
obelix.gaul.csd.uwo.ca[11]% who am i
jkaba      /dev/pts/30  Mar 27 19:21
obelix.gaul.csd.uwo.ca[12]% asn3.sh < mst_graph1
```

NOTE IF THIS PROGRAM, DOES NOT RUN. EXIT AND ENTER THE FOLLOWING  
asn3.sh < file  
This is how it was specified to run in the assignment description

#### Adjacency List Representation

Note: x(y) where x = end point and y = weight

```
Adjacent to 1: 2 (12), 3 (10), 6 (3),
Adjacent to 2: 1 (12), 4 (20), 5 (20), 7 (6),
Adjacent to 3: 1 (10), 6 (30), 7 (28), 8 (9),
Adjacent to 4: 2 (20), 8 (40), 9 (36),
Adjacent to 5: 2 (20), 10 (50), 11 (44),
Adjacent to 6: 3 (30), 12 (60), 13 (52), 1 (3), 11 (18),
Adjacent to 7: 3 (28), 14 (70), 15 (50), 2 (6), 12 (21),
Adjacent to 8: 4 (40), 16 (80), 17 (68), 3 (9), 13 (24),
Adjacent to 9: 4 (36), 18 (95), 19 (76), 14 (27),
Adjacent to 10: 5 (50), 20 (100), 15 (30),
Adjacent to 11: 5 (44), 12 (5), 6 (18), 16 (33),
Adjacent to 12: 6 (60), 11 (5), 7 (21),
Adjacent to 13: 6 (52), 14 (5), 8 (24),
Adjacent to 14: 7 (70), 13 (5), 9 (27),
Adjacent to 15: 7 (50), 10 (30),
Adjacent to 16: 8 (80), 11 (33),
Adjacent to 17: 8 (68), 18 (5),
Adjacent to 18: 9 (95), 17 (5),
Adjacent to 19: 9 (76), 20 (5),
Adjacent to 20: 10 (100), 19 (5),
```

#### Order added to MST by Prim's Algorithm:

Added: 1	Root Node	Weight: 0
Added: 6	Parent: 1	Weight: 3
Added: 3	Parent: 1	Weight: 10
Added: 8	Parent: 3	Weight: 9
Added: 2	Parent: 1	Weight: 12
Added: 7	Parent: 2	Weight: 6
Added: 11	Parent: 6	Weight: 18
Added: 12	Parent: 11	Weight: 5
Added: 5	Parent: 2	Weight: 20
Added: 4	Parent: 2	Weight: 20
Added: 13	Parent: 8	Weight: 24
Added: 14	Parent: 13	Weight: 5
Added: 9	Parent: 14	Weight: 27
Added: 16	Parent: 11	Weight: 33
Added: 10	Parent: 5	Weight: 50
Added: 15	Parent: 10	Weight: 30
Added: 17	Parent: 8	Weight: 68
Added: 18	Parent: 17	Weight: 5
Added: 19	Parent: 9	Weight: 76
Added: 20	Parent: 19	Weight: 5

```
obelix.gaul.csd.uwo.ca[13]% exit
obelix.gaul.csd.uwo.ca[14]% exit
```

script done on Mon Mar 27 19:22:39 2017