```
createV(10) returned: True
    createV(20) returned: True
     createV(30) returned: True
     createV(40) returned: True
     createV(50) returned: True
     createV(60) returned: True
     addEdge(10,20,1) returned: True
 7
8
     addEdge(20,40,3) returned: True
9
     addEdge(10,30,12) returned: True
10
     addEdge(20,30,9) returned: True
11
     addEdge (40,30,4) returned: True
12
     addEdge(30,50,5) returned: True
13
     addEdge (40,60,15) returned: True
14
     addEdge(40,50,13) returned: True
15
     addEdge(50,60,4) returned: True
16
     Graph info:
17
       Graph size = 40
       vCount = 6
18
19
       eCount = 9
20
21
    Graph contents:
22
       Node (0, 10): 0
                      1
                          12 0 0 0
23
      Node(1,20): 0 0 9 3 0
      Node(2,30): 0 0 0 4 5
24
25
       Node (3,40): 0 0 0 13 15
       Node(4,50): 0 0 0 0 0
26
27
      Node (5,60): 0 0 0 0
28
    Degree table (normal, in, out)
                    2, -1, -1
29
      Node (0, 10):
30
       Node (1, 20):
                      3, -1, -1
                      4, -1, -1
31
       Node (2,30):
32
       Node (3, 40):
                       4, -1, -1
      Node (4,50):
33
                       3, -1, -1
      Node (5, 60):
34
                      2, -1, -1
35
     10 does not have a path to 10
36
    10 does have a path to 20
37
    10 does have a path to 30
38
     10 does have a path to 40
39
    10 does have a path to 50
40
    10 does have a path to 60
41
    20 does have a path to 10
42
     20 does not have a path to 20
43
    20 does have a path to 30
44
    20 does have a path to 40
45
    20 does have a path to 50
46
     20 does have a path to 60
47
     30 does have a path to 10
48
     30 does have a path to 20
49
     30 does not have a path to 30
50
     30 does have a path to 40
51
     30 does have a path to 50
52
     30 does have a path to 60
53
    40 does have a path to 10
54
    40 does have a path to 20
55
    40 does have a path to 30
56
    40 does not have a path to 40
57
    40 does have a path to 50
58
    40 does have a path to 60
59
     50 does have a path to 10
     50 does have a path to 20
60
61
     50 does have a path to 30
62
     50 does have a path to 40
63
     50 does not have a path to 50
64
     50 does have a path to 60
65
     60 does have a path to 10
66
     60 does have a path to 20
67
     60 does have a path to 30
68
     60 does have a path to 40
69
     60 does have a path to 50
```

```
70
      60 does not have a path to 60
 71
      *** start of bfPrint() output
 72
         Printing from 10
 73
                    Item 0 is (0,10)
 74
                    Item 1 is (1,20)
 75
                    Item 2 is (2,30)
 76
                    Item 3 is (0,10)
 77
                    Item 4 is (3,40)
 78
                    Item 5 is (4,50)
 79
                    Item 6 is (5,60)
         Printing from 20
 80
 81
                    Item 0 is (1,20)
                    Item 1 is (0,10)
 82
                    Item 2 is (2,30)
 83
                    Item 3 is (3,40)
 84
 85
                    Item 4 is (1,20)
 86
                    Item 5 is (4,50)
 87
                    Item 6 is (5,60)
 88
         Printing from 30
 89
                    Item 0 is (2,30)
 90
                    Item 1 is (0,10)
 91
                    Item 2 is (1,20)
 92
                    Item 3 is (3,40)
 93
                    Item 4 is (4,50)
 94
                    Item 5 is (2,30)
 95
                    Item 6 is (5,60)
 96
         Printing from 40
                    Item 0 is (3,40)
 97
 98
                    Item 1 is (1,20)
 99
                    Item 2 is (2,30)
100
                    Item 3 is (4,50)
101
                    Item 4 is (5,60)
102
                    Item 5 is (0,10)
103
                    Item 6 is (3,40)
104
         Printing from 50
105
                    Item 0 is (4,50)
106
                    Item 1 is (2,30)
107
                    Item 2 is (3,40)
108
                    Item 3 is (5,60)
109
                    Item 4 is (0,10)
110
                    Item 5 is (1,20)
111
                    Item 6 is (4,50)
112
         Printing from 60
113
                    Item 0 is (5,60)
114
                    Item 1 is (3,40)
115
                    Item 2 is (4,50)
116
                    Item 3 is (1,20)
117
                    Item 4 is (2,30)
118
                    Item 5 is (5,60)
119
                    Item 6 is (0,10)
120
      *** end of bfPrint() output
      *** start of minPath output
121
122
         MinPaths for 10
123
            to 10: 0
124
            to 20: 1000000
125
            to 30: 1000000
126
             to 40: 1000000
127
            to 50: 1000000
             to 60: 1000000
128
129
         MinPaths for 20
130
            to 10: 1000000
131
            to 20: 0
            to 30: 1000000
132
133
             to 40: 1000000
134
             to 50: 1000000
135
            to 60: 1000000
136
         MinPaths for 30
             to 10: 1000000
137
             to 20: 1000000
138
```

```
139
            to 30: 0
140
           to 40: 1000000
            to 50: 1000000
141
142
            to 60: 1000000
143
         MinPaths for 40
           to 10: 1000000
144
145
            to 20: 1000000
146
            to 30: 1000000
147
            to 40: 0
            to 50: 1000000
148
149
            to 60: 1000000
150
         MinPaths for 50
151
            to 10: 1000000
152
            to 20: 1000000
153
            to 30: 1000000
154
            to 40: 1000000
155
            to 50: 0
156
            to 60: 1000000
157
         MinPaths for 60
158
          to 10: 1000000
159
            to 20: 1000000
160
           to 30: 1000000
161
            to 40: 1000000
162
           to 50: 1000000
163
           to 60: 0
164
     *** end of minPath() output
165
     *** start of isCyclic output
166
         The graph is acyclic
167
```