```
1 C:\Users\Gwgw\.jdks\corretto-17.0.7\bin\java.exe "-
  javaagent:C:\Program Files\JetBrains\IntelliJ IDEA
  2023.2.3\lib\idea_rt.jar=62965:C:\Program Files\
  JetBrains\IntelliJ IDEA 2023.2.3\bin" -Dfile.encoding
  =UTF-8 -classpath "C:\Users\Gwgw\Documents\E-class\
  ΠΛΗΡΟΦΟΡΙΚΗ\Η' Εξάμηνο\Τεχνητή Νοημοσύνη (Artificial
  Intelligence)\GIT PROJECTS\AI-Projects\out\production
  \AI-Projects" Main
  _______
  ====
3
                  Cost: 0
                  Dimension: 5
4
5
6
          Torch: --> Right: Son1 (1s) | Son2 (3s
  ) | Mother (6s) | Father (8s) | Grandfather (12s) |
8
______
  ====
10
11
12
13
______
  ====
15
                  Cost: 0
                  Dimension: 5
16
17
18
          Torch: --> Right: Son1 (1s) | Son2 (3s
19 Left:
  ) | Mother (6s) | Father (8s) | Grandfather (12s) |
20
______
  ====
22
23
24
```

```
______
 ====
26
             Cost: 3
27
             Dimension: 5
28
29
30 Left: Son1 (1s) | Son2 (3s) |
                  Torch: <-- Right
 : Mother (6s) | Father (8s) | Grandfather (12s) |
31
______
 ====
33
34
35
______
 ====
37
             Cost: 4
38
             Dimension: 5
39
40
41 Left: Son2 (3s) | Torch: --> Right: Son1 (1s
 ) | Mother (6s) | Father (8s) | Grandfather (12s) |
42
______
 ====
44
45
46
______
48
             Cost: 10
             Dimension: 5
49
50
51
52 Left: Son1 (1s) | Son2 (3s) | Mother (6s) |
 : <-- Right: Father (8s) | Grandfather (12s) |
```

```
53
______
55
56
57
 ______
 ====
           Cost: 11
59
           Dimension: 5
60
61
62
63 Left: Son2 (3s) | Mother (6s) |
                 Torch: --> Rig
 : Son1 (1s) | Father (8s) | Grandfather (12s) |
64
______
 ====
66
67
68
______
70
           Cost: 23
71
           Dimension: 5
72
73
74 Left: Father (8s) | Son2 (3s) | Mother (6s) |
 Grandfather (12s) |
         Torch: <-- Right: Son1 (
 1s) |
75
______
 ====
77
78
79
```

```
80
  ______
  =====
81
               Cost: 26
82
               Dimension: 5
83
84
85 Left: Father (8s) | Mother (6s) | Grandfather (12s
         Torch: --> Right: Son1 (1s) | Son2 (3s
  ) |
86
______
  =====
88
89
90
______
  =====
92
               Cost: 29
               Dimension: 5
93
94
95
96 Left: Father (8s) | Son1 (1s) | Mother (6s) |
  Grandfather (12s) | Son2 (3s) |
                        Torch: <--
  Right:
97
______
  =====
99
100
101
102
103 Search time: 0.002 sec.
104
105 Process finished with exit code 0
106
```