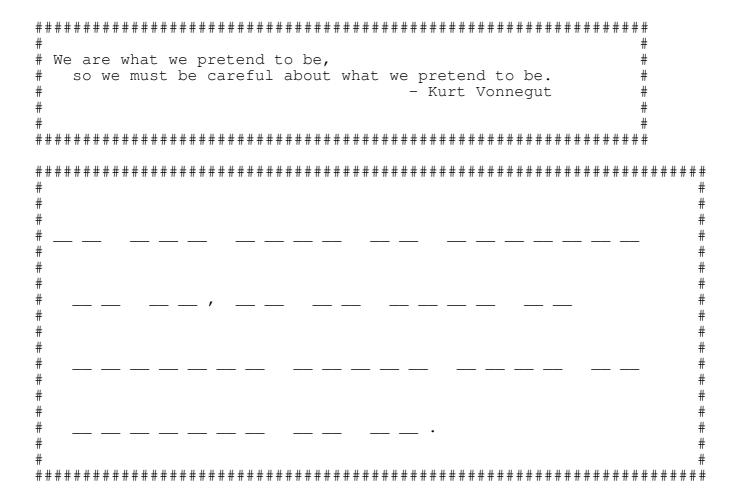
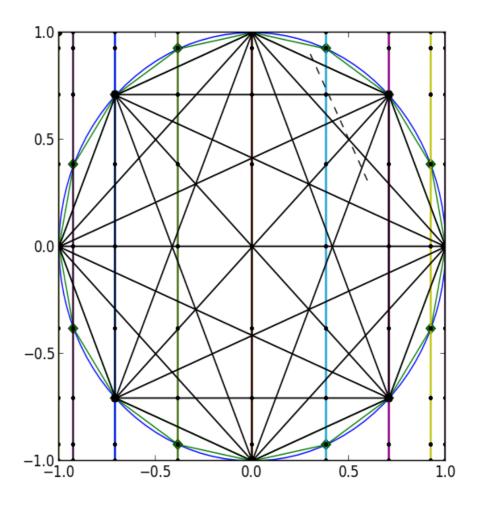
```
scout_bearing_to_compasspoint.py
0.0 => ['N']
90.0 \Rightarrow ['E']
POST: 0.0 \Rightarrow N
                                      POST: 90.0 => E
            2
                3
                            Easting
                                                     3
#
        1
                    4
                                    #
                                             1
                                                 2
                                                         4
                                                               - Easting
#
                                    #
#
     5
                С
                                    #
                                         5
        Α
            В
                    D
                        Ε
                                                 F
                                                     Ι
                                                         R
                                                             W
                                             Η
#
                                    #
     4
        F
            G
                    J
                        K
                                         4
                                                         Υ
                                                                 V
                Η
                            Ι
                                             Ζ
                                                 Q
                                                     Χ
                                                             В
#
     3
                                         3
        L
                    0
                        Ρ
                                    #
                                             Τ
                                                 Α
                                                     G
                                                         J
            Μ
                Ν
                                                             U
#
     2
                                    #
                                         2
        Q
            R
                S
                    Τ
                        U
                                                     K
                                                         0
                                                             D
                                             \mathbf{L}
                                                 Ν
#
                                    #
     1
            W
                Χ
                    Υ
                        Ζ
                                             S
                                                 Ε
                                                     Ρ
                                                             C
        V
                                                         Μ
#
                                    #
#
                                    #
      Northing
                                           Northing
#
                                    #
                                      POST: 112.5 => ESE
 POST: 22.5 \Rightarrow NNE
                                    #
#
                                                 2
                                                     3
                                    #
                                             1
                                                         4
                                                             5
                                                                Easting
#
        1
            2
                3
                    4
                        5
                            Easting
                                    #
#
                                    #
                                         5
                                                 F
                                                             V
                                                         IJ
                                             L
                                                     Т
#
     5
                G
                        Τ
        D
            Η
                    Α
                                    #
                                         4
                                             Ν
                                                 Q
                                                     Τ
                                                         G
                                                             Ρ
                                                                 Α
#
     4
        Ζ
                            J
            W
                Q
                    М
                        Ν
                                    #
                                         3
                                             C
                                                 J
                                                     Χ
                                                         Η
                                                             Υ
#
     3
        Υ
            L
                V
                    R
                        Ρ
                                    #
                                         2
                                             S
                                                 0
                                                     M
                                                         W
                                                             Ζ
#
     2
        С
                Χ
                    Ι
                        F
            В
                                    #
                                         1
                                             D
                                                 R
                                                         В
                                                             Ε
                                                     K
#
     1
        K
            E
                    IJ
                        \bigcirc
                                    #
#
                                    #
                                           Northing
      Northing
                                    #
                                    #
#
                                    #
 POST: 45.0 \Rightarrow NE
                                      POST: 135.0 =>
                                                    SE
#
                                    #
#
        1
            2
                3
                    4
                        5
                                    #
                                             1
                                                 2
                                                     3
                                                         4
                                                             5
                            Easting
                                                              - Easting
#
                                    #
#
                                    #
     5
                                         5
        Ε
            Υ
                Ζ
                    Q
                        Α
                                             S
                                                 K
                                                     F
                                                         V
                                                             L
#
                                    #
     4
            G
                    0
                        J
                            Т
                                         4
                                             0
                                                 Τ
                                                         Υ
        В
                L
                                                     Ρ
                                                             Ν
                                                                 Ι
#
     3
                                    #
                                         3
        Η
            Ρ
                S
                    V
                                             Α
                                                 G
                                                     Ζ
                                                         Ε
                        Μ
                                                             Μ
#
     2
                                    #
                                         2
        U
            Ν
                Ι
                    D
                        F
                                             Q
                                                 U
                                                     С
                                                         W
                                                             J
#
     1
                        С
                                    #
        Χ
            R
                K
                    W
                                         1
                                             Χ
                                                 R
                                                     В
                                                         \Box
                                                             Η
                                    #
                                    #
                                           Northing
      Northing
#
#
#
 POST: 67.5 \Rightarrow ENE
                                    #
                                      POST: 157.5 =>
                                                    SSE
                                    #
#
#
        1
            2
                3
                    4
                        5
                                    #
                                                 2
                                                     3
                                                             5
                            Easting
                                             1
                                                         4
                                                               - Easting
#
                                    #
#
     5
                                    #
                                         5
        K
            W
                R
                    Ζ
                        F
                                             W
                                                 Α
                                                     Ζ
                                                         Υ
                                                             C
#
     4
                        Χ
                                    #
                                         4
                                                 Τ
                                                             S
        L
            Α
                J
                    В
                            V
                                             R
                                                     Ε
                                                         Ι
                                                                 Ρ
#
     3
                                    #
                                         3
                    D
                        С
                                             V
                                                 K
        Μ
            Ν
                Q
                                                     В
                                                         Η
                                                             \mathbf{L}
#
     2
                                    #
                                         2
        S
            Ε
                U
                    0
                        Η
                                             D
                                                 J
                                                     U
                                                         0
                                                             Q
#
                                    #
     1
        Р
            Τ
                Ι
                    G
                        Υ
                                         1
                                             G
                                                 Χ
                                                     F
                                                         Ν
                                                             М
                                    #
                                    #
      Northing
                                           Northing
#
                                    #
```

```
POST: 180.0 =>
                                  POST: 270.0 =>
              S
                                               W
#
       1
           2
               3
                                            2
                                                3
                                                       5 - Easting
                  4
                      5 - Easting
                                         1
                                                   4
#
#
    5
              Ζ
                  C
                                 #
                                     5
                                                       С
       IJ
           R
                                         0
                                            G
                                                Η
                                                   S
                     Ν
#
           V
                                 #
                                                       Ε
    4
       В
              K
                  Μ
                     Α
                         S
                                     4
                                         J
                                            F
                                                \mathbf{L}
                                                   W
                                                          Α
#
    3
       F
           Ι
                     Р
                                 #
                                     3
                                            Ζ
              W
                  J
                                         Τ
                                                R
                                                   М
                                                       Χ
#
                                 #
    2
                  Ε
                     G
                                                   Υ
                                                       Ρ
       0
           D
              Η
                                         Ν
                                            D
                                                Q
#
           Υ
                                            IJ
                                                       Ι
#
#
     Northing
                                       Northing
POST: 202.5 => SSW
                                  POST: 292.5 => WNW
#
           2
              3
                                 #
                                            2
                                                3
       1
                  4
                      5 - Easting
                                         1
                                                   4
                                                       5 - Easting
#
                                 #
#
    5
                                 #
                                     5
       Р
           U
              V
                  C
                     R
                                        Ν
                                            В
                                                Ρ
                                                   IJ
                                                       Ζ
#
    4
                  G
                     Τ
                                 #
                                     4
                                            Υ
       Ε
           K
              Ι
                         Μ
                                         J
                                                Τ
                                                   Η
                                                       W
                                                          Α
#
    3
                      Ζ
                                 #
                                     3
       Η
           F
              D
                  Q
                                        F
                                            0
                                                V
                                                   Ε
                                                       D
#
    2
           J
                  Υ
                                 #
                                     2
                                            K
                                                Q
                                                   Ι
       0
              Α
                     L
                                        Μ
                                                       R
#
                                 #
           Χ
                      S
                                         C
                                            S
                                                       Χ
    1
       W
              Ν
                  В
                                                G
                                                   Τ.
#
                                 #
#
                                 #
      Northing
                                       Northing
#
                                  POST: 315.0 => NW
 POST: 225.0 => SW
                                            2
                                         1
                                                3
                                                   4
                                                       5 - Easting
#
       1
           2
               3
                  4
                      5 - Easting
                                 #
#
                                     5
                                 #
                                            Ν
                                                Ε
                                                   Ζ
                                                       L
#
    5
       U
           R
              K
                  G
                     Η
                                 #
                                     4
                                        М
                                            Η
                                                   Q
                                                       F
                                                          Τ
                                                J
#
    4
       F
           Υ
              В
                  V
                     Ι
                         М
                                 #
                                     3
                                         U
                                            Α
                                                D
                                                   Ρ
                                                       0
#
    3
       Ε
           J
              Χ
                  Ν
                     \mathbf{L}
                                 #
                                     2
                                         G
                                            V
                                                K
                                                   Χ
                                                       В
#
    2
           Τ
                  Ζ
                     Ρ
       Q
              Α
                                 #
                                         R
                                            Τ
                                                   С
#
                      S
    1
       C
           0
              \Box
                  W
#
                                       Northing
     Northing
                                 POST: 247.5 => WSW
                                  POST: 337.5 => NNW
#
#
#
           2
                                            2
       1
              3
                      5 - Easting
                                 #
                                                3
                                                       5 - Easting
                  4
                                         1
                                                   4
#
                                 #
#
    5
                                 #
                                     5
       Т
           K
              \bigcirc
                  Α
                     Ν
                                         G
                                            Р
                                                С
                                                   \mathbf{F}
                                                       W
                                 #
#
    4
       Ρ
           F
              Ε
                  W
                     С
                                     4
                                         В
                                            Η
                                                   J
                                                          7.
                         Υ
                                                Ι
                                                       Μ
    3
                                 #
                                     3
       Ζ
                                            Υ
                                                   Τ
           L
              J
                  G
                     D
                                         D
                                                0
                                                       K
#
    2
           V
                                 #
                                     2
       R
              М
                  U
                     Χ
                                         U
                                            Q
                                                Ν
                                                   L
                                                       Α
#
    1
       Ι
                  S
                                         F
                                            Χ
                                                   \nabla
                                                       S
           Q
              В
                     Η
                                     1
                                                R
     Northing
                                       Northing
```





```
# 1. Follow bearing 247.5 to next Post,
                                           Record letter @ Easting 0, Northing 4
# Word 1
# START at POST: 315.0 => NW
                                           DEBUG post:292.5 (-0.92,0.38) c:w
                                         # 2. Follow bearing 112.5 to next Post,
                                           Record letter @ Easting 4, Northing 3
# 1. Follow bearing 90.0 to next Post,
  Record letter @ Easting 4, Northing 1
                                           DEBUG post:112.5 (0.92,-0.38) c:h
  DEBUG post:45.0 (0.71,0.71) c:W
                                         # 3. Follow bearing 315.0 to next Post,
# 2. Follow bearing 157.5 to next Post,
                                           Record letter @ Easting 0, Northing 2 ____
  Record letter @ Easting 2, Northing 1
                                           DEBUG post:337.5 (-0.38,0.92) c:a
  DEBUG post:90.0 (1.00,0.00) c:e
                                         # 4. Follow bearing 101.25 to next Post,
                                           Record letter @ Easting 6, Northing 4 __
DEBUG post:45.0 (0.71,0.71) c:t
                                         #
# # Word 1 is We, post path is [315.0, 45.0, 90.0]
# # Word 3 is what, post path is [22.5, 292.5, 112.5,
#
                                         337.5, 45.0]
#Word 2
# START at POST: 0.0 \Rightarrow N
                                         # 1. Follow bearing 112.5 to next Post,
  Record letter @ Easting 0, Northing 5
                                         # Word 4
  DEBUG post:45.0 (0.71,0.71) c:a
                                         # START at POST: 135.0 => SE
# 2. Follow bearing 213.75 to next Post,
  Record letter @ Easting 0, Northing 5
                                         # 1. Follow bearing 33.75 to next Post,
  DEBUG post:202.5 (-0.38,-0.92) c:r
                                           Record letter @ Easting 4, Northing 2 _
# 3. Follow bearing 101.25 to next Post,
                                           DEBUG post:112.5 (0.92,-0.38) c:w
  Record letter @ Easting 4, Northing 2 _
                                         # 2. Follow bearing 236.25 to next Post,
#
  DEBUG post:180.0 (0.00,-1.00) c:e
                                           Record letter @ Easting 4, Northing 2 ____
#
                                           DEBUG post:180.0 (0.00,-1.00) c:e
# # Word 2 is are, post path is [0.0, 45.0, 202.5, 180.0]
                                        # # Word 4 is we, post path is [135.0, 112.5, 180.0]
#
                                         # Word 3
                                         #
# START at POST: 22.5 => NNE
                                         # Word 5
```

```
# START at POST: 22.5 => NNE
                                              # START at POST: 225.0 => SW
#
# 1. Follow bearing 281.25 to next Post,
                                             # 1. Follow bearing 123.75 to next Post,
  Record letter @ Easting 0, Northing 3 _____
                                             # Record letter @ Easting 4, Northing 1 _____
  DEBUG post:0.0 (-0.00,1.00) c:p
                                              # DEBUG post:202.5 (-0.38,-0.92) c:b
# 2. Follow bearing 135.0 to next Post,
                                             # 2. Follow bearing 348.75 to next Post,
  Record letter @ Easting 4, Northing 5 _____
                                                Record letter @ Easting 3, Northing 5
  DEBUG post:90.0 (1.00,0.00) c:r
                                                DEBUG post:315.0 (-0.71,0.71) c:e
# 3. Follow bearing 281.25 to next Post,
  Record letter @ Easting 4, Northing 3 _____
                                              DEBUG post:292.5 (-0.92,0.38) c:e
                                              # # Word 7 is be,, post path is [225.0, 202.5, 315.0]
# 4. Follow bearing 67.5 to next Post,
                                              Record letter @ Easting 0, Northing 5 _____
                                              DEBUG post:22.5 (0.38,0.92) c:t
# 5. Follow bearing 180.0 to next Post,
                                              #Word 8
  Record letter @ Easting 3, Northing 4 _____
                                              # START at POST: 67.5 => ENE
  DEBUG post:157.5 (0.38,-0.92) c:e
# 6. Follow bearing 303.75 to next Post,
                                              # 1. Follow bearing 315.0 to next Post,
  Record letter @ Easting 1, Northing 2 _____
                                                Record letter @ Easting 3, Northing 1 _____
  DEBUG post:270.0 (-1.00,0.00) c:n
                                              # DEBUG post:22.5 (0.38,0.92) c:s
#7. Follow bearing 146.25 to next Post,
                                             # 2. Follow bearing 146.25 to next Post,
  Record letter @ Easting 3, Northing 3 ____
                                                Record letter @ Easting 4, Northing 2 _____
   DEBUG post:202.5 (-0.38,-0.92) c:d
                                                 DEBUG post:90.0 (1.00,0.00) c:o
#
# # Word 5 is pretend, post path is [22.5, 0.0, 90.0,
                                              # # Word 8 is so, post path is [67.5, 22.5, 90.0]
292.5, 22.5, 157.5, 270.0, 202.5]
```

# Word 10

```
# START at POST: 247.5 => WSW
                                               Record letter @ Easting 0, Northing 4 _____
#
                                             # DEBUG post:315.0 (-0.71,0.71) c:f
# 1. Follow bearing 56.25 to next Post,
                                            # 6. Follow bearing 123.75 to next Post,
  Record letter @ Easting 0, Northing 3 _____
                                             # Record letter @ Easting 4, Northing 5 _____
                                             # DEBUG post:112.5 (0.92,-0.38) c:u
  DEBUG post:45.0 (0.71,0.71) c:m
# 2. Follow bearing 180.0 to next Post,
                                             # 7. Follow bearing 270.0 to next Post,
  Record letter @ Easting 2, Northing 2 _____
                                                Record letter @ Easting 2, Northing 3 _____
  DEBUG post:135.0 (0.71,-0.71) c:u
                                                DEBUG post:247.5 (-0.92,-0.38) c:l
# 3. Follow bearing 326.25 to next Post,
  Record letter @ Easting 0, Northing 1 _____
                                             DEBUG post:337.5 (-0.38,0.92) c:s
                                             # # Word 12 is careful, post path is [315.0, 22.5, 0.0,
# 4. Follow bearing 146.25 to next Post,
                                             270.0, 202.5, 315.0, 112.5, 247.5]
  Record letter @ Easting 2, Northing 4 _____
                                             DEBUG post:135.0 (0.71,-0.71) c:t
                                             #
                                             #
# Word 13
                                             # START at POST: 22.5 => NNE
# # Word 10 is must, post path is [247.5, 45.0, 135.0,
337.5, 135.0]
# 1. Follow bearing 270.0 to next Post,
                                               Record letter @ Easting 0, Northing 2 _____
DEBUG post:337.5 (-0.38,0.92) c:a
                                             # 2. Follow bearing 168.75 to next Post,
# Word 11
                                               Record letter @ Easting 1, Northing 4 _____
# START at POST: 337.5 => NNW
                                             # DEBUG post:180.0 (0.00,-1.00) c:b
                                             # 3. Follow bearing 0.0 to next Post,
# 1. Follow bearing 101.25 to next Post,
  Record letter @ Easting 1, Northing 4 _____
                                            # Record letter @ Easting 4, Northing 3 _____
  DEBUG post:45.0 (0.71,0.71) c:b
                                            # DEBUG post:0.0 (-0.00,1.00) c:o
# 2. Follow bearing 180.0 to next Post,
                                             # 4. Follow bearing 247.5 to next Post,
  Record letter @ Easting 4, Northing 3 ____
                                             # Record letter @ Easting 1, Northing 3
  DEBUG post:135.0 (0.71,-0.71) c:e
                                             # DEBUG post:315.0 (-0.71,0.71) c:u
#
#
                                             # 5. Follow bearing 123.75 to next Post,
Record letter @ Easting 3, Northing 4 _____
# # Word 11 is be, post path is [337.5, 45.0, 135.0]
                                                DEBUG post:112.5 (0.92,-0.38) c:t
                                             # # Word 13 is about, post path is [22.5, 337.5, 180.0,
                                             0.0, 315.0, 112.5]
                                             #
                                             # Word 14
# Word 12
                                             # START at POST: 315.0 => NW
# START at POST: 315.0 => NW
                                             # 1. Follow bearing 112.5 to next Post,
# 1. Follow bearing 78.75 to next Post,
                                               Record letter @ Easting 0, Northing 5 _____
  Record letter @ Easting 1, Northing 2 _____
                                            # DEBUG post:90.0 (1.00,0.00) c:w
  DEBUG post:22.5 (0.38,0.92) c:c
                                             # 2. Follow bearing 348.75 to next Post,
# 2. Follow bearing 281.25 to next Post,
                                             # Record letter @ Easting 0, Northing 2 _____
  Record letter @ Easting 1, Northing 5 _____
                                             # DEBUG post:67.5 (0.92,0.38) c:h
  DEBUG post:0.0 (-0.00,1.00) c:a
                                             # 3. Follow bearing 247.5 to next Post,
# 3. Follow bearing 225.0 to next Post,
                                             # Record letter @ Easting 4, Northing 5 _____
  Record letter @ Easting 3, Northing 3
                                             # DEBUG post:247.5 (-0.92,-0.38) c:a
  DEBUG post:270.0 (-1.00,0.00) c:r
                                             # 4. Follow bearing 45.0 to next Post,
# 4. Follow bearing 146.25 to next Post,
                                                Record letter @ Easting 0, Northing 5 _____
  Record letter @ Easting 1, Northing 4 _____
                                                DEBUG post:22.5 (0.38,0.92) c:t
  DEBUG post:202.5 (-0.38,-0.92) c:e
# 5. Follow bearing 348.75 to next Post,
```

```
# 3. Follow bearing 202.5 to next Post,
# # Word 14 is what, post path is [315.0, 90.0, 67.5,
                                           Record letter @ Easting 3, Northing 4
                                           DEBUG post:157.5 (0.38,-0.92) c:e
247.5, 22.5]
# 4. Follow bearing 22.5 to next Post,
                                          Record letter @ Easting 2, Northing 1 ____
DEBUG post:67.5 (0.92,0.38) c:t
# Word 15
                                        # 5. Follow bearing 225.0 to next Post,
# START at POST: 112.5 => ESE
                                           Record letter @ Easting 1, Northing 4 _____
                                           DEBUG post:202.5 (-0.38,-0.92) c:e
                                        # 6. Follow bearing 56.25 to next Post,
# 1. Follow bearing 326.25 to next Post,
  Record letter @ Easting 2, Northing 1
                                           Record letter @ Easting 2, Northing 2
  DEBUG post:0.0 (-0.00,1.00) c:w
                                        # DEBUG post:90.0 (1.00,0.00) c:n
# 2. Follow bearing 191.25 to next Post,
                                        # 7. Follow bearing 213.75 to next Post,
  Record letter @ Easting 1, Northing 4
                                           Record letter @ Easting 1, Northing 2
  DEBUG post:202.5 (-0.38,-0.92) c:e
                                           DEBUG post:157.5 (0.38,-0.92) c:d
# # Word 15 is we, post path is [112.5, 0.0, 202.5]
                                        # # Word 16 is pretend, post path is [315.0, 157.5, 67.5,
                                        157.5, 67.5, 202.5, 90.0, 157.5]
                                        # Word 17
                                        # START at POST: 337.5 => NNW
                                        # 1. Follow bearing 101.25 to next Post,
                                        # Record letter @ Easting 6, Northing 4 _____
                                        # DEBUG post:45.0 (0.71,0.71) c:t
                                        # 2. Follow bearing 202.5 to next Post,
                                          Record letter @ Easting 1, Northing 2 ____
                                           DEBUG post:180.0 (0.00,-1.00) c:o
                                        # # Word 17 is to, post path is [337.5, 45.0, 180.0]
                                        # Word 18
                                        # START at POST: 180.0 => S
#
                                        # 1. Follow bearing 0.0 to next Post,
# Word 16
                                           Record letter @ Easting 2, Northing 5
# START at POST: 315.0 => NW
                                           DEBUG post:0.0 (-0.00,1.00) c:b
                                        # 2. Follow bearing 146.25 to next Post,
# 1. Follow bearing 146.25 to next Post,
                                           Record letter @ Easting 0, Northing 1 _____
  Record letter @ Easting 6, Northing 4
                                        #
                                           DEBUG post:112.5 (0.92,-0.38) c:e
  DEBUG post:157.5 (0.38,-0.92) c:p
# 2. Follow bearing 22.5 to next Post,
```

# # Word 18 is be., post path is [180.0, 0.0, 112.5]

Record letter @ Easting 3, Northing 5 \_\_\_\_

DEBUG post:67.5 (0.92,0.38) c:r