```csharp
 1  using OpenCvSharp;
 2
 3  namespace Turkmite
 4  {
 5      public abstract class TurkmiteBase
 6      {
 7          public Mat.Indexer<Vec3b> Indexer { get; }
 8
 9          private int x;
10          private int y;
11          private int direction;
12
13          public TurkmiteBase(Mat image)
14          {
15              Indexer = image.GetGenericIndexer<Vec3b>();
16              x = image.Width / 2;
17              y = image.Height / 2;
18              direction = 0;
19          }
20
21          public abstract int PreferredStepCount { get; }
22
23          public void Step()
24          {
25              Vec3b currentColor = Indexer[y, x];
26
27              (Vec3b newColor, int turn) = GetStep(currentColor);
28              Indexer[y, x] = newColor;
29              direction += turn;
30
31              direction = (direction + 4) % 4;
32
33              (int, int)[] dxy = [(0, -1), (1, 0), (0, 1), (-1, 0)];
34              (var dx, var dy) = dxy[direction];
35              x += dx;
36              y += dy;
37              x = Math.Min(Math.Max(x, 0), 199);
38              y = Math.Min(Math.Max(y, 0), 199);
39          }
40
41          protected abstract (Vec3b newColor, int turn) GetStep(Vec3b     ⮑
                currentColor);
42      }
43  }
44
```