
Algorithm 3 : $H(\text{init}, \text{goal}, \text{dir})$

```
man_dist = 0
for c in '12345678' do
    x1,y1 = get_index(init,c)
    x2,y2 = get_index(goal,c)
    man_dist += abs(x1 - x2) + abs(y1 - y2)
end for
return man_dist
```
