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

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for node in nodes do
  if  $\text{getdirection}(\text{node}) \neq \text{dir} \wedge \text{state}(\text{node}) \neq \text{'open'}$  then
    add node to opposite nodes list
  end if
end for
for node in opposite nodes list do
  goal = node
  calculate h minimum =  $h\_cal(\text{current\_node}, \text{goal}, \text{dir}) + gvalue(\text{node})$ 
end for
return minimum_h
```
