

Global Variables

Removed
At code
stage

• puzzle = [[1, 2, 3], [-1, 4, 6], [7, 5, 8]]

← • final = [[1, 2, 3], [4, 5, 6], [7, 8, -1]]

Structure of Variables

• Ann[] → [puzzle, int: depth, int: hvalue]

• duplicateUp; duplicateDown, duplicateLeft, duplicateRight.
→ [puzzle, int: hvalue]

• Assend[] → [duplicateUp]

def depth():

Ann = [[puzzle, 0, compareC]]

if depthNonEfficient(Ann)

return

else

Not found.

def depthNonEfficient(Ann)

temp = depthEfficient(Ann) → True if found.

if temp

print(Ann)

else

return False.

def depthEfficient(Ann)

count = Ann[len(Ann)-1]

if ~~depth~~ count[1] >= 15.

return False.

if count[2] == 0

return True.

(Ans, ~~Ans~~) = check all (Ans)

puzzle = Ans[len(Ans)-1][0]

depthEfficient (Ans) → Recursive

def checkAll():

i, j → find blank

if i != 0

move up and save in duplicate Up

if j != 0

move ^{left} down and save in duplicate ~~Down~~ ^{left}

if i != 2

move Down and save in duplicate Down.

if j != 2

move Right and save it duplicate ~~up~~ Right.

Assend ← Store all duplicates in ascending
order of value.

Ans.append (Assend [0])

return (Ans)