class Solution:

"""

@param costs: n x 3 cost matrix

@return: An integer, the minimum cost to paint all houses

"""

def minCost(self, costs):

# write your code here

nhouse = len(costs)

costr = [0 for i in range(nhouse+1)]

costb = [0 for i in range(nhouse+1)]

costg = [0 for i in range(nhouse+1)]

for i in range(1,nhouse+1):

costr[i] = min(costb[i-1]+costs[i-1][0],costg[i-1]+costs[i-1][0])

costb[i] = min(costr[i-1]+costs[i-1][1],costg[i-1]+costs[i-1][1])

costg[i] = min(costr[i-1]+costs[i-1][2],costb[i-1]+costs[i-1][2])

return min(costr[-1],costb[-1],costg[-1])