from bisect import bisect\_left

def maximumLen(nums):

list = []

for num in nums:

pos = bisect\_left(list, num )

if pos == len(list):

list.append( num )

else:

list[ pos ] = num

print(len(list)-1)

def maxBoxes(boxes):

sortedBoxes = sorted( boxes, key=lambda coord: (coord[0],coord[1],-coord[2]) )

maximumLen( z for x,y,z in sortedBoxes )

n=int(input())

boxes=[]

for x in range(0,n):

boxes.append(list([int(item) for item in input().split()]))

maxBoxes(boxes)