Lab02

```
# -*- coding: utf-8 -*-
"""
Created on Sat Nov 13 20:21:36 2021

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"""

import random as r

#User Input

Bank=[]
N=int(input())
for i in range(N):
  Bank.append(input())

#Creating Population

population_size= 2**N-1
#print(population_size)
i=0
population=[]
while (i<=population_size):
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  combination=""
  for j in range(N):
    bit=str(r.randrange(0,2))
    combination+=bit

  if combination not in population:
    #if combination is not '0000000':
    population.append(combination)
    i+=1



#Sum Calculation


zeros=""
for k in range(N):
  zeros+="0"
if zeros in population:
  population.remove(zeros)

total_sum=[]

for combination in population:
  sum=0
  for i in range (N):
    if combination[i]=="1":
      pos=Bank[i].split()
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      state=pos[0]
      if state=="d":
        sum+= int(pos[1])
      else:
        sum-=int(pos[1])
  total_sum.append(sum)

flag="yes"
for i in range (population_size):
  if total_sum[i]==0:
    #print(i)
    print(population[i])
    flag="no"
if flag=="yes":
  print(-1)
```