13주차 문제풀이 Sangmyung ICPC Team



Step1 – 필요한 기능

- ① make_team(curr_emp, cnt) ----- 팀 만들기
- ② get_team_capa(team) ----- 팀 능력치 구하기
- ③ get_min_gap() ----- 팀 능력치 차이 구하기

Step2 - 구현: get_team_capa(team)

```
def get_team_capa(team):
    total_capa = 0

for i in range(n//2-1):
    for j in range(i+1, n//2):
        total_capa += capabilities[team[i]][team[j]] + capabilities[team[j]][team[i]]

return total_capa
```

같은 팀에 속한 모든 팀원들의 능력치 시너지(?) 구하기

Step2 - 구현: make_team(curr_emp, cnt)

```
idef make_team(curr_emp, cnt):
   if cnt == n/2:
        global min_gap
        global start
        global link
                                                     else:
                                                         for i in range(curr_emp, n):
        for e in range(n):
                                                             if not selected[i]:
            if selected[e] == True: # start 팀
                                                                 selected[i] = True
                start.append(e)
                                                                 make team(i+1, cnt+1)
            else: # link 팀
                                                                 selected[i] = False
                link.append(e)
        start_capa = get_team_capa(start)
        link_capa = get_team_capa(link)
        min_gap = min(min_gap, abs(start_capa-link_capa))
        start = []
        link = []
```

```
min_gap = 10000
start, link = [], []

n = int(input())
selected = [False for _ in range(n)]
capabilities = [[*map(int, stdin.readline().split())] for _ in range(n)]

make_team(0, 0)
print(min_gap)
```

Selected: start팀으로 선택된 사람들은 True Link팀으로 선택된 사람들은 False

Thanks