우체국

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> 2141번: 우체국
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> BAE/<JOON>
> ONLINE JUDGE
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> ‹› https://www.acmicpc.net/problem/2141

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1. Greedy Algorithm

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1. Greedy Algorithm

1.1. Solution 1

```python
import sys

n = int(sys.stdin.readline())

town = []
accum_town = dict()

for i in range(n):
    x, a = map(int, sys.stdin.readline().split())
    town.append((x, a))

prev = 0
town = sorted(town)
for i, t in enumerate(town):
    prev += t[1]
    accum_town[i] = prev

answer = town[0]
for i, t in enumerate(town[1:]):
    if 2 * accum_town[i] < accum_town[n - 1]:
```

```
        answer = t

print(answer[0])
```

1.2. Solution 2

```
import sys

n = int(sys.stdin.readline())

town = []

max_people = 0
for i in range(n):
    x, a = map(int, sys.stdin.readline().split())
    town.append((x, a))
    max_people += a

accum_people = 0
for t in sorted(town, key=lambda x: x[0]):
    accum_people += t[1]
    if accum_people >= max_people / 2:
        print(t[0])
        break
```

- 최적 부분 구조: 우체국이 위치

- 탐욕 선택 속성: 우체국이 움직임에 따라 가까워지는 사람 수가 멀어지는 사람 수보다 더 많은 경우 선택