Assumption

(第一题)

The upper and lower surfaces of each slab are square, and the side lengths of all slabs in a street are the same (that is, slabs with different side lengths will not be connected to each other).

In a street, the direction of the sidewalk remains unchanged and parallel to the lane.

The destruction of external force will not cause the slab to translate along the ground (if translation occurs, we think that the brick is damaged and needs to be replaced).

Cutting is more difficult than Raising, and it can include raising operations when cutting slabs.

Our maintenance costs do not include maintenance costs for slabs and road edges.

The inflation rate of each cost is fixed, that is, its annual growth rate is a constant;

Every year, the length of roads damaged due to weather and other factors accounts for a linear relationship with the total road length;

The cost change of cutting and raising road is consistent with the change of material cost;

The length ratio of cutting and raising roads in the same year is always the same, that is, a single unit cost can be used to replace the respective costs of the two when calculating expenses;

\*中文

每块slab的上下表面都是正方形，且在一条街道内的所有slabs的边长都是一样的（即不会出现不同边长的slab相互衔接的情况）。

在一条街道内sidewalk的方向不变，且平行于lane。

外力的破坏不会使slab沿地面平移（如果发生平移，我们认为砖块已损坏，需要被replace）。

Cutting的工艺难度要高于Raising，在对slab进行Cutting时可以包含raising的操作。

我们的维护费用不包括对slabs和道路边缘衔接处的维护的费用。

假设各项成本的膨胀率是固定的，即其每年的增长率是一个常数；

假设每年因气候等影响因素破损的道路长度占总道路长度呈线性关系；

假设cutting 和 raising道路的成本变化与材料成本变化一致；

假设cutting与raising道路在同一年的长度比始终不变，即在计算经费时可以用一个单一的单位成本来代替两者各自的成本；