Shortest Routes I (CSES)

Time limit: 1.00 s/Memory limit: 512 MB

There are n cities and m flight connections between them.

Your task is to determine the length of the shortest route from Chiayi to every city.

● Input

- The first input line has two integers n and m: the number of cities and flight connections. The cities are numbered $1,2,...,n$, and city 1 is Chiayi.
- After that, there are m lines describing the flight connections. Each line has three integers a, b and c: a flight begins at city a, ends at city b, and its length is c. Each flight is a one-way flight.
- You can assume that it is possible to travel from Chiayi to all other cities.

● Output

- Print n integers: the shortest route lengths from Chiayi to cities $1,2,...,n$.

● Constraints

- $1 \leq n \leq 10^5$
- $1 \leq m \leq 2 \times 10^5$
- $1 \leq a, b \leq n$
- $1 \leq c \leq 10^9$

範例輸入1	範例輸出1
3 4 1 2 6 1 3 2 3 2 3 1 3 4	0 5 2

reference: https://cses.fi/problemset/task/1671 (https://cses.fi/problemset/task/1671)