

# Programming assignment 13

## Dijkstra

### Input (Standard input)

In the first line, the numbers of vertices  $N(1 \leq N \leq 5000)$  and edges  $M(1 \leq M \leq 260,000)$  are given. In each of the next  $M$  lines, a directed edge  $(x, y)$  with weight  $w$  is given  $x \ y \ w$ .

### Output (Standard output)

Print the largest weight of all shortest-path weights from vertex 1.

### [Example]

Input	Output
5 10 1 2 10 1 3 5 2 4 1 2 3 2 3 2 3 3 4 9 3 5 2 4 5 4 5 1 7 5 3 6	9

### Description

1. File name must be Dijkstra.cpp
2. Make a comment of your student ID, name and class in the first line of the source code. ex) 2014601028\_Honggildong\_A
3. Back up your submitted source code for an unexpected accident.