# Programming assignment 13

# Dijkstra

## Input (Standard input)

The number of vertex N is given  $(1 \le N \le 5,000)$  in the first line.

Next two lines are given.

First line of the two lines, index of a vertex(a) and

the number of edges E of the vertex(a) are given  $(1 \le E \le N)$ .

In second line, destination vertex(b) from vertex(a) of First line and the weight W of the edge from vertex(a) to vertex(b) are given, resp ectively.

#### **Output (Standard output)**

Print the most large weight all shortest-path weight of vertex 1.

### [Example]

Input	Output
5	9
12	
2 10 3 5	
22	
4 1 3 2	
33	
2 3 4 9 5 2	
41	
54	
52	
1736	

#### **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. Please keep the source code that you have submitted for some unexpected accident.