PROACTIVE KU

11. Graphs 2

msdb@korea.ac.kr

KOREA UNIVERSITY 고려대학교 KOREA UNIVERSITY

Agenda

- Instruction
- Shortest Path Algorithm

Instruction

- Make a zip file named "**studentid**" that includes one folder and source **codes.**
- **Make sure your codes can be properly compiled.**
- **Do not submit whole solution file.**

Shortest Path Algorithm

- Implement a function which finds a shortest path from A.
  - Graph is no direction(undirected) and has weights.
  - Use matrix to represent your graph.
  - Algorithms: Use Dijkstra algorithm to find paths.
  - Here is a given graph:
    - Start from A (#1).

```
int w[10][10] = {
        {0, 6, 3, 0, 9,   0, 0, 0, 0, 0},
        {6, 0, 4, 2, 0,   0, 0, 9, 0, 0},
        {3, 4, 0, 2, 9,   9, 0, 0, 0, 0},
        {0, 2, 2, 0, 0,   8, 0, 9, 0, 0},
        {9, 0, 9, 0, 0,   8, 0, 0, 0, 18},
        {0, 0, 9, 8, 8,   0, 9, 7, 0, 10},
        {0, 0, 0, 0, 0,   9, 0, 5, 1, 3},
        {0, 9, 0, 9, 0,   7, 5, 0, 4, 0},
        {0, 0, 0, 0, 0,   0, 1, 4, 0, 4},
        {0, 0, 0, 0, 18,10, 3, 0, 4, 0}
}
```