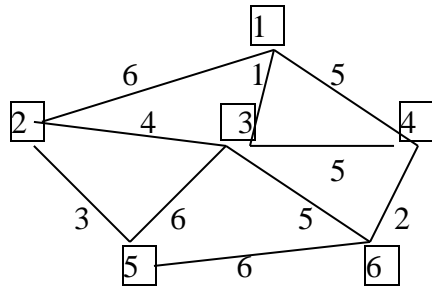


Lab#11 Prim's Algorithm (Minimal Spanning Tree)

1. Input data 는 다음 그래프를 사용할 것 (시작점은 정점 1)



2. **Output** 은 다음과 같다.

1) Weighted Graph 를 다음과 같이 출력할것

	v1	v2	v3	v4	v5	v6
v1	100	6	1	5	100	100
v2	6	100	4	100	3	100
v3	1	4	100	5	6	5
v4	5	100	5	100	100	2
v5	100	3	6	100	100	6
v6	100	100	5	2	6	100

2) Minimal Spanning Tree (v1 에서 시작하면)

1, 3 → 3, 2 → 2, 5 → 5, 6 → 6, 4

Or

1, 3 → 3, 2 → 2, 5 → 1, 4 → 4, 6

prim(int v) //starting vertex “v”

{

1. copy one row from **cost matrix**[starting vertex] into **lowcost**

2. mark **closest** for starting vertex

3. Loop until n-1

3.1 Select the lowest cost vertex from the lowcost
and print Vi and Vj

3.2 Mark Vj in closest

3.3 If no vertex to select, then backtrack to previous one.(optional)

}