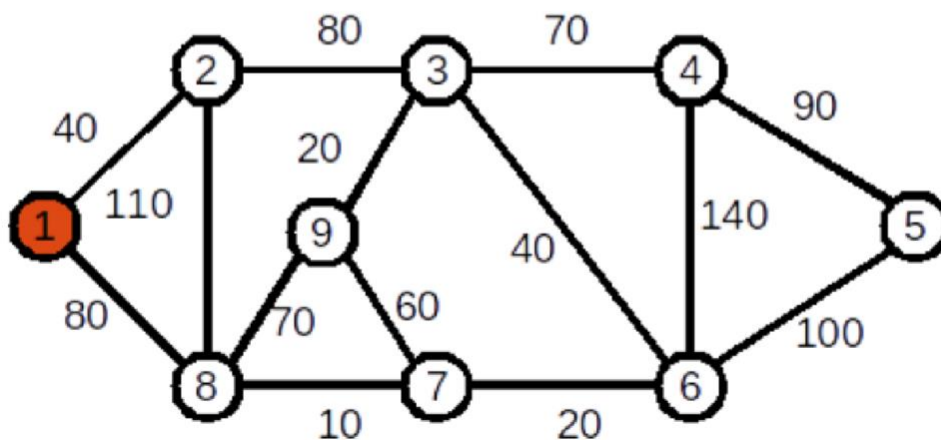


#### 4. Greedy – Arbori Parțiali de Cost Minim

Determinați, utilizând Algoritmul lui Kruskal și, apoi, algoritmul lui Prim, arborele parțial de cost minim al următorului graf:



#### Kruskal

Pas	Muchie	Formare Graf
Initializare	-	{1},{2},{3},{4},{5},{6},{7},{8},{9}
1	{7,8}	{7,8},{1},{2},{4},{5},{6},{9}
2	{3,9}	{7,8},{3,9},{1},{2},{4},{5}
3	{6,7}	{6,7,8},{3,9},{1},{2},{4},{5}
4	{1,2}	{1,2},{6,7,8},{3,9},{4},{5}
5	{3,6}	{3,6,7,8,9},{1,2},{4},{5}
6	{9,7}	Formeaza ciclu
7	{9,8}	Formeaza ciclu
8	{3,4}	{3,4,6,7,8,9},{1,2},{5}
9	{2,3}	{1,2,3,4,6,7,8,9},{5}
10	{1,8}	Formeaza ciclu
11	{4,5}	{1,2,3,4,5,6,7,8,9}

## Prim

Pas	Muchie	Formare Graf
Initializare	-	{8}
1	{8,7}	{7,8}
2	{7,6}	{6,7,8}
3	{6,3}	{3,6,7,8}
4	{3,9}	{3,6,7,8,9}
5	{3,4}	{3,4,6,7,8,9}
6	{4,5}	{3,4,5,6,7,8,9}
7	{2,3}	{2,3,4,5,6,7,8,9}
8	{1,2}	{1,2,3,4,5,6,7,8,9}