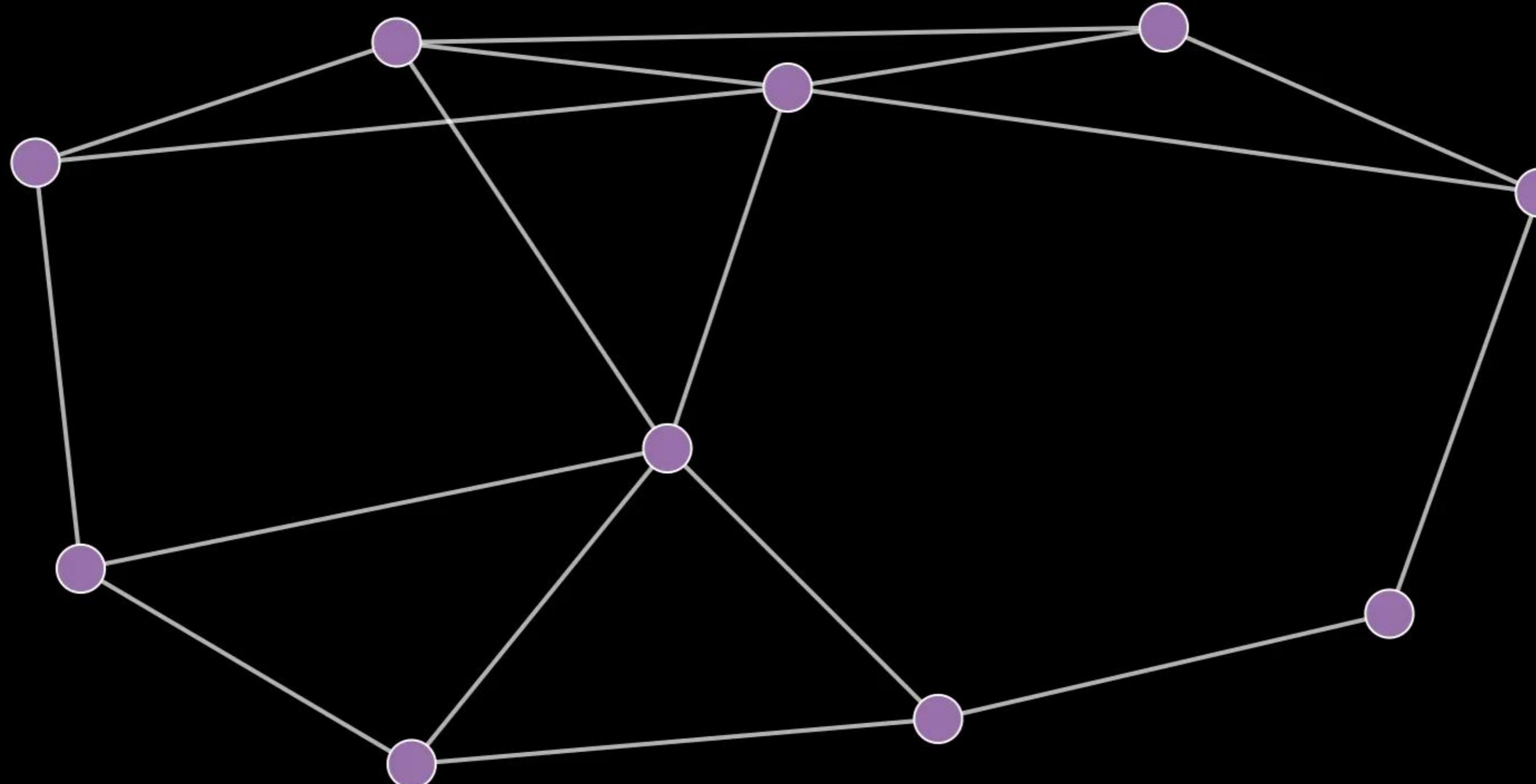
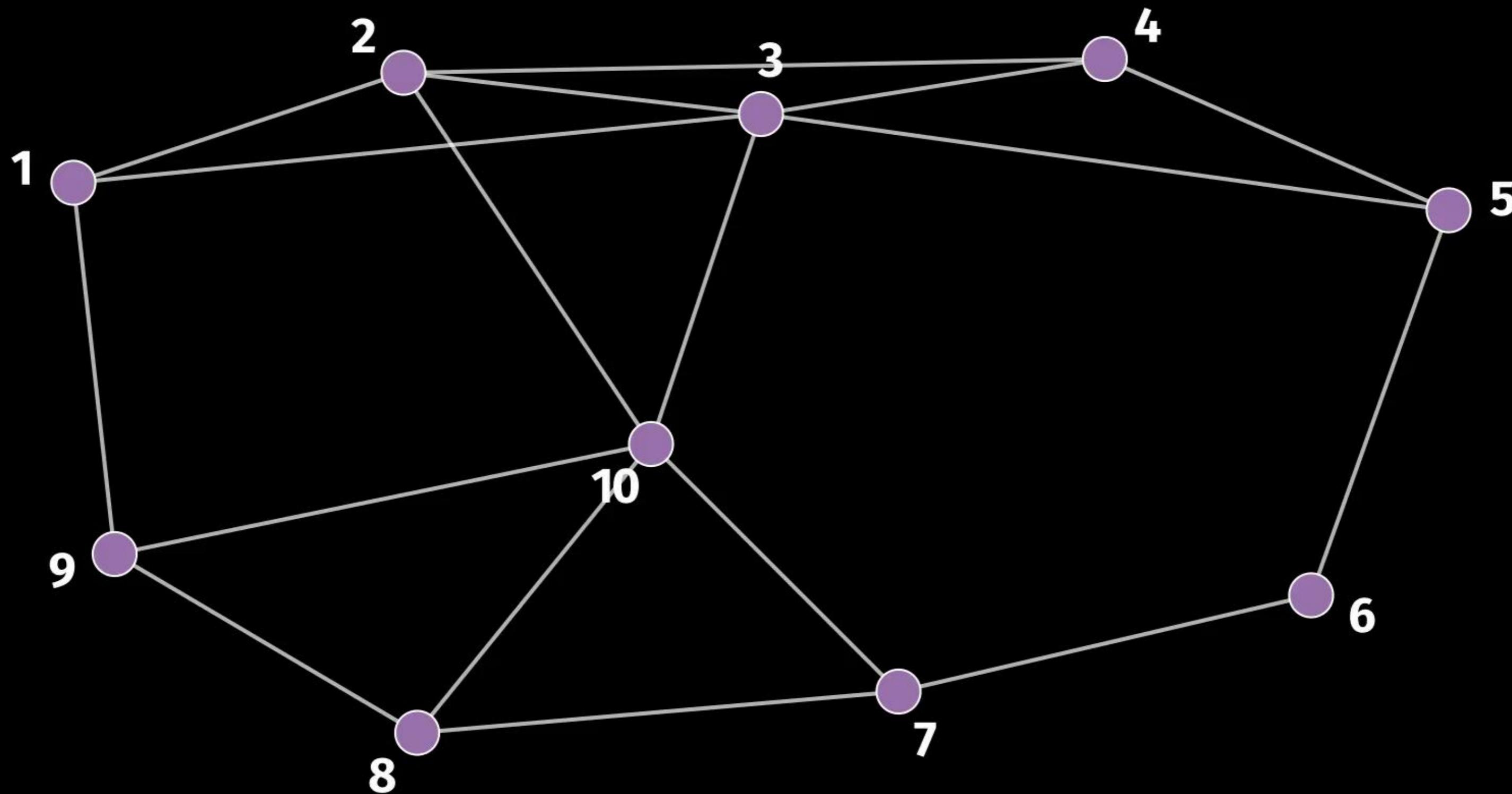


Minimum Spanning Tree (Kruskal)

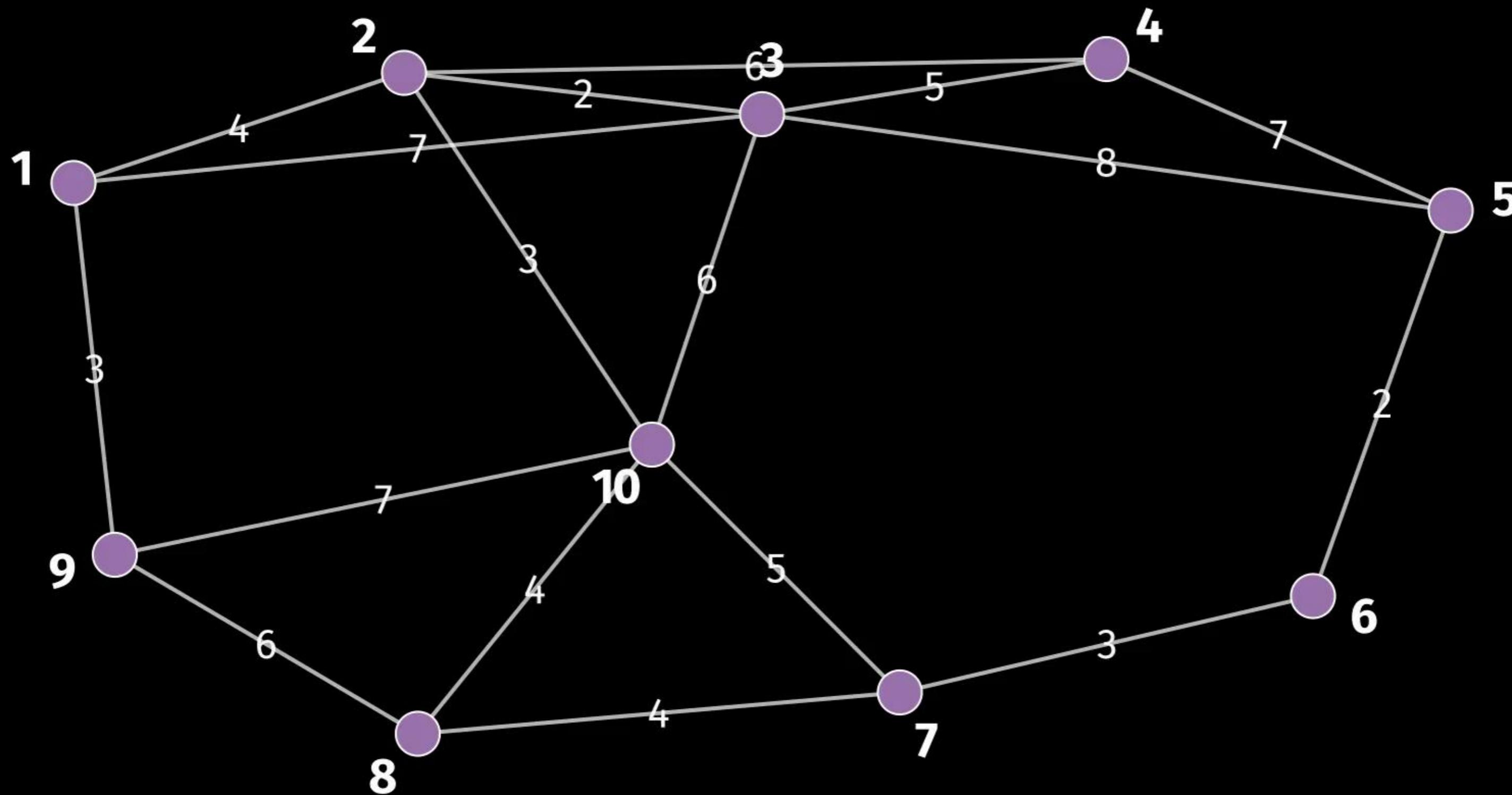
Minimum Spanning Tree (Kruskal)



Minimum Spanning Tree (Kruskal)



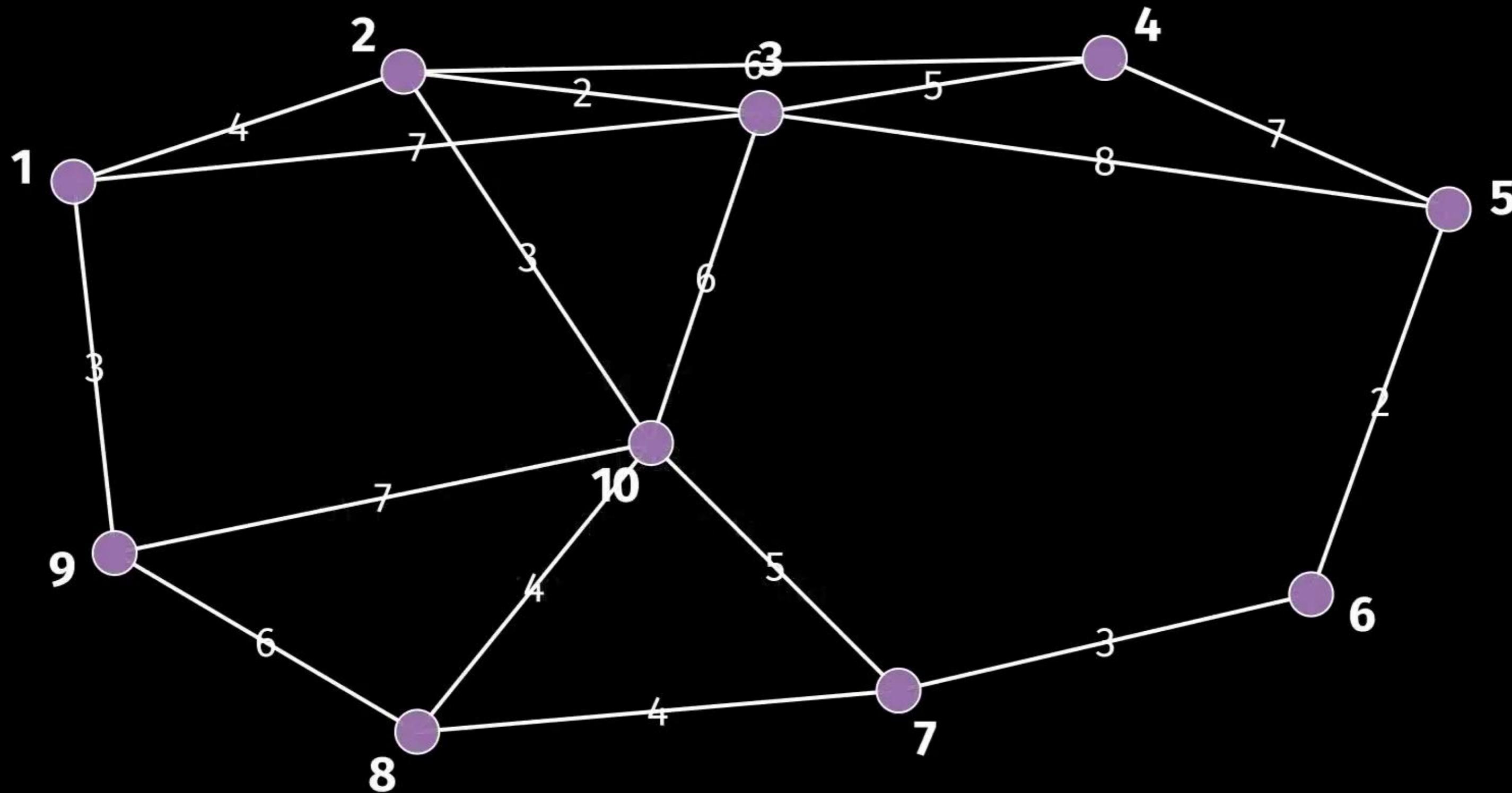
Minimum Spanning Tree (Kruskal)



Minimum Spanning Tree (Kruskal)

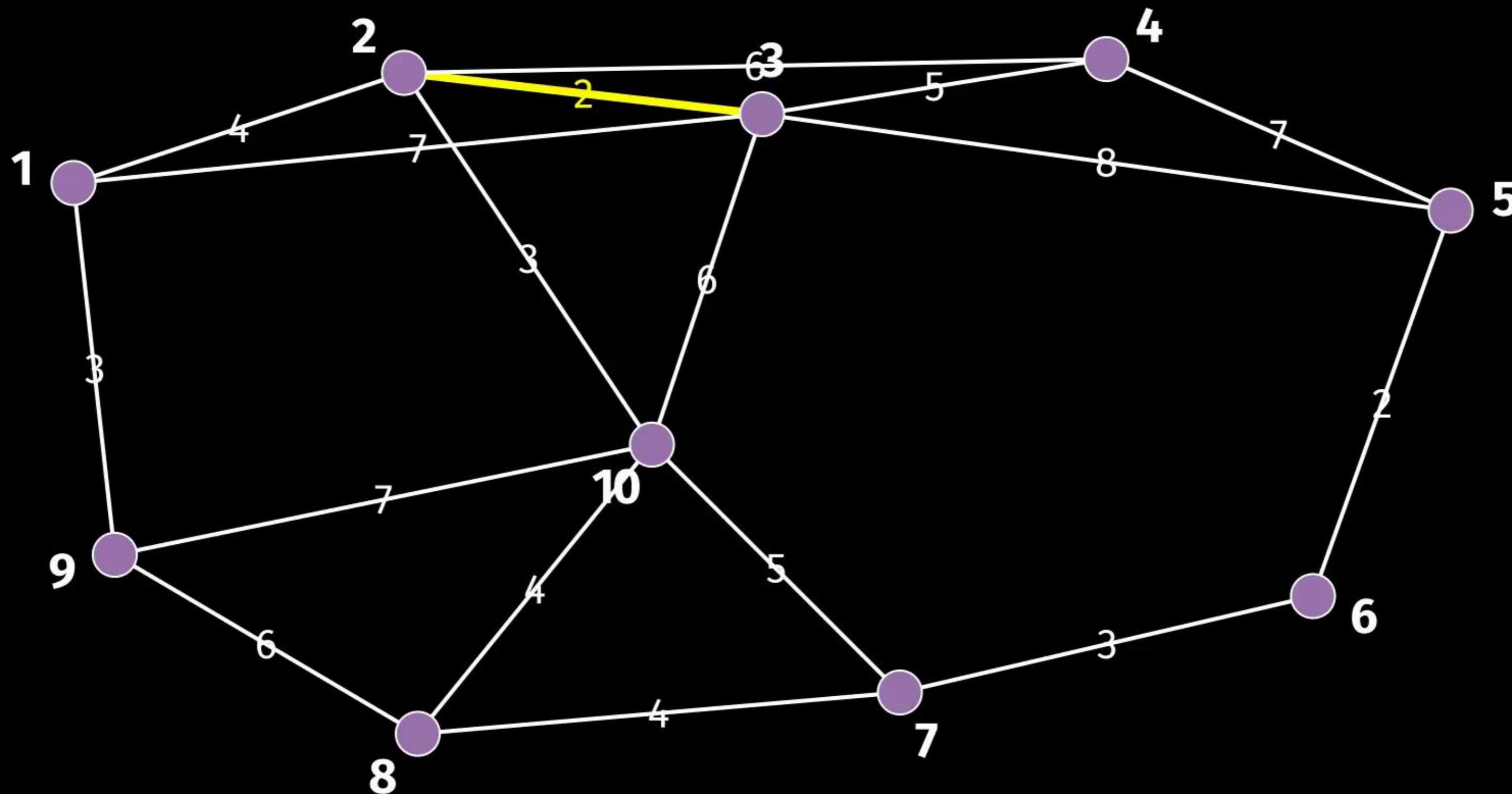


Minimum Spanning Tree (Kruskal)



Peso total MST: **0**

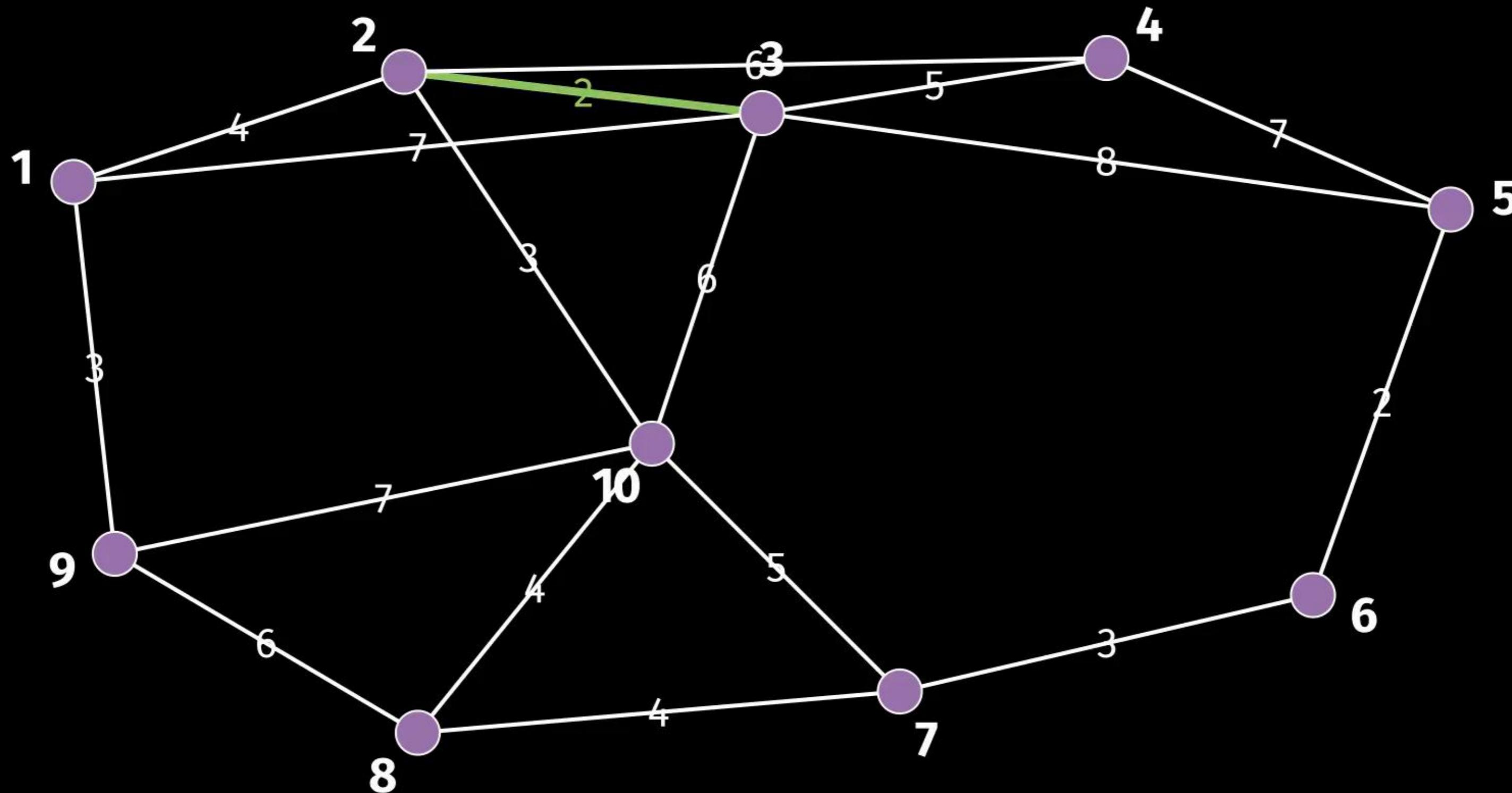
Minimum Spanning Tree (Kruskal)



Peso total MST: **0**

Candidata: (2, 3) con peso 2

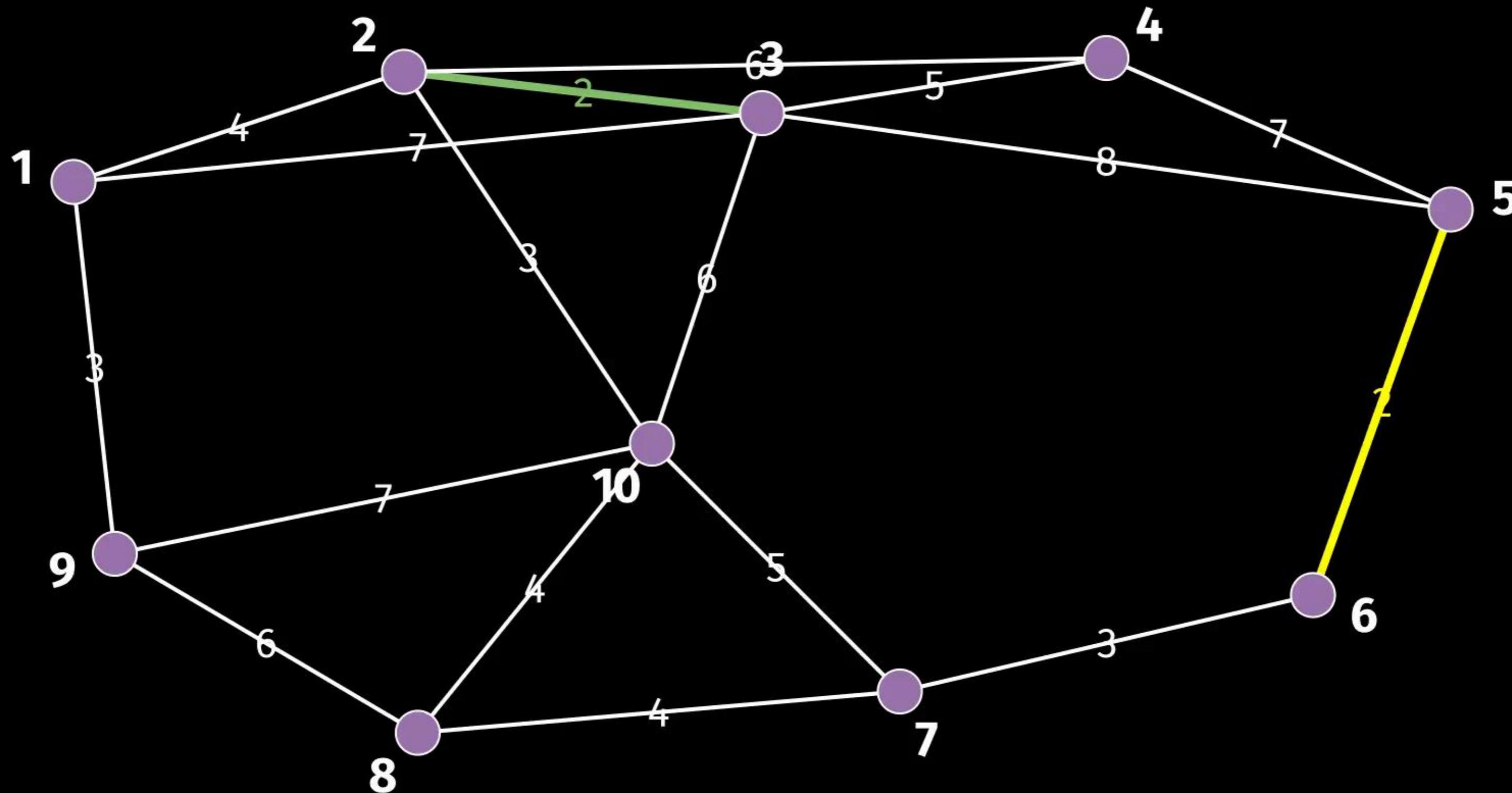
Minimum Spanning Tree (Kruskal)



Peso total MST: **2**

Aceptada

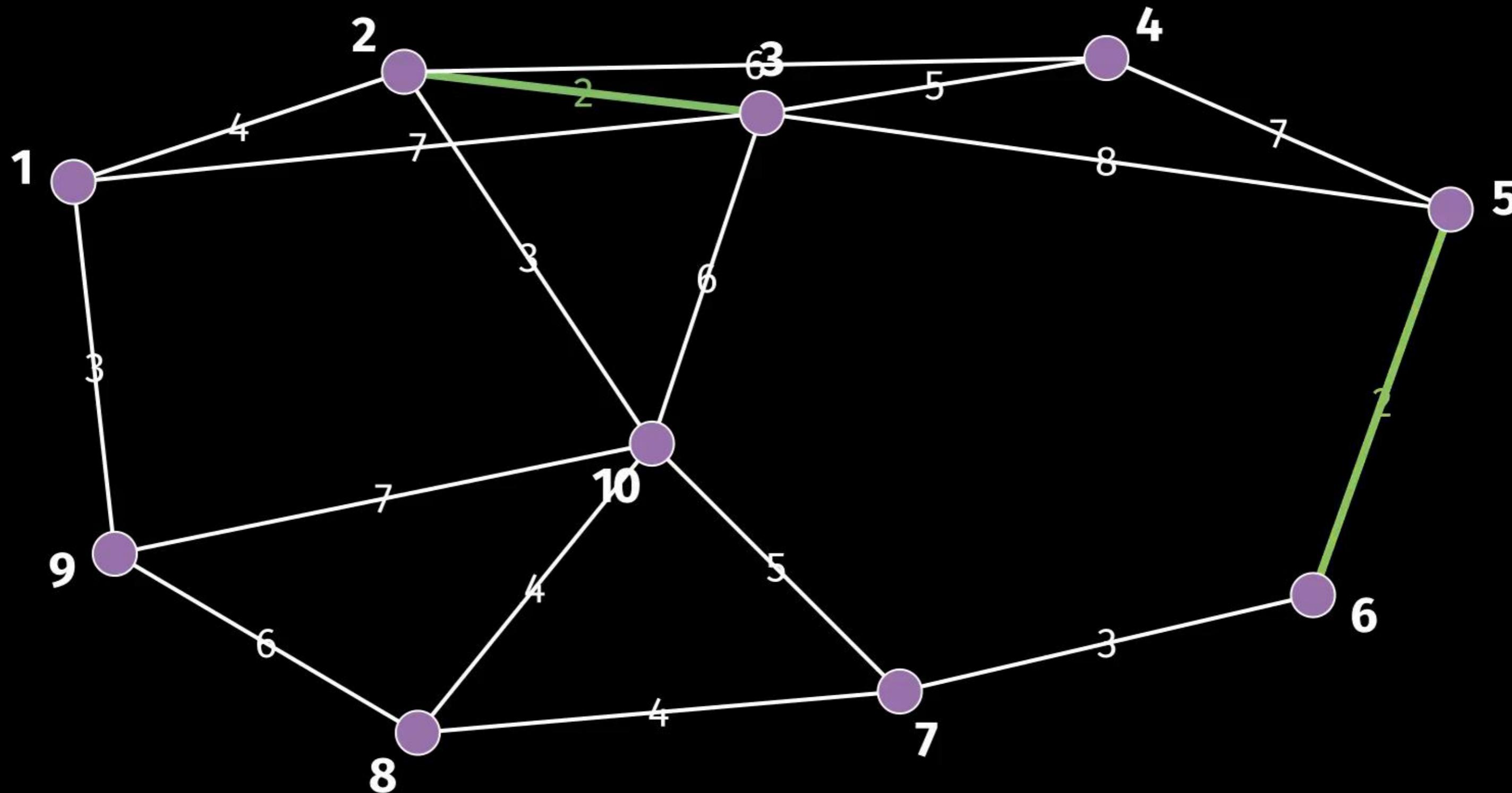
Minimum Spanning Tree (Kruskal)



Peso total MST: **2**

Candidata: (6, 5) con peso 2

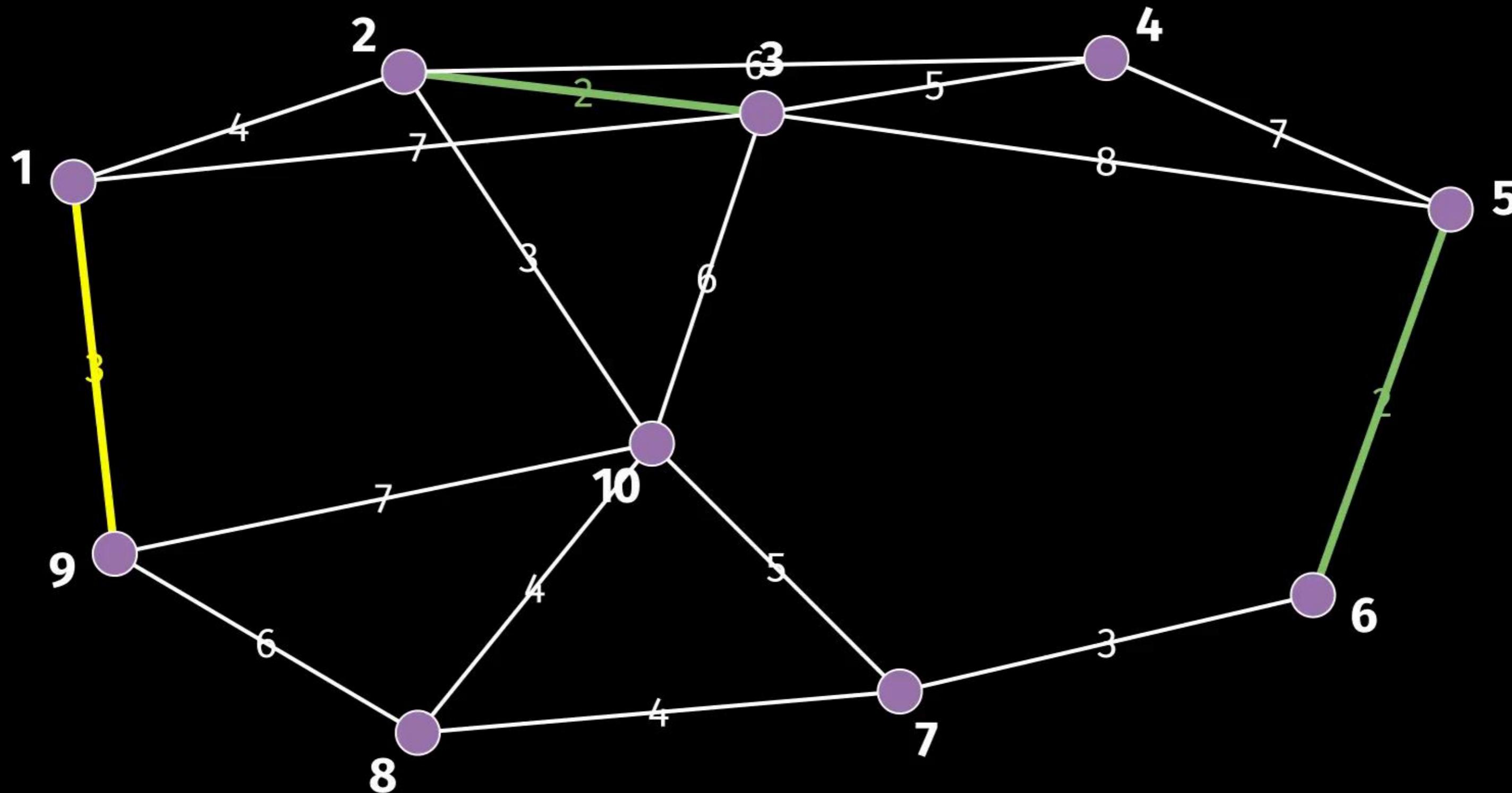
Minimum Spanning Tree (Kruskal)



Peso total MST: **4**

Aceptada

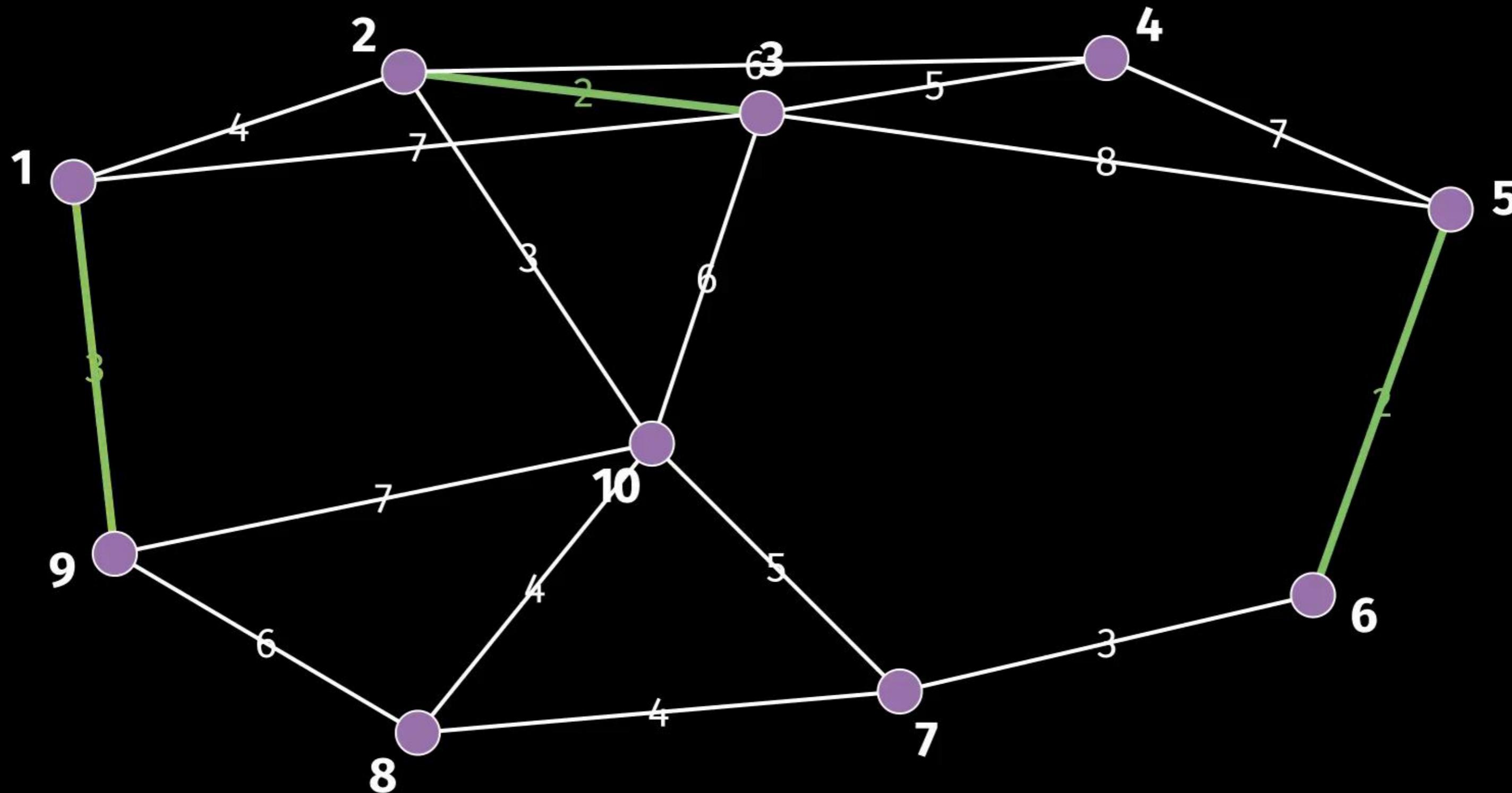
Minimum Spanning Tree (Kruskal)



Peso total MST: **4**

Candidata: (1, 9) con peso 3

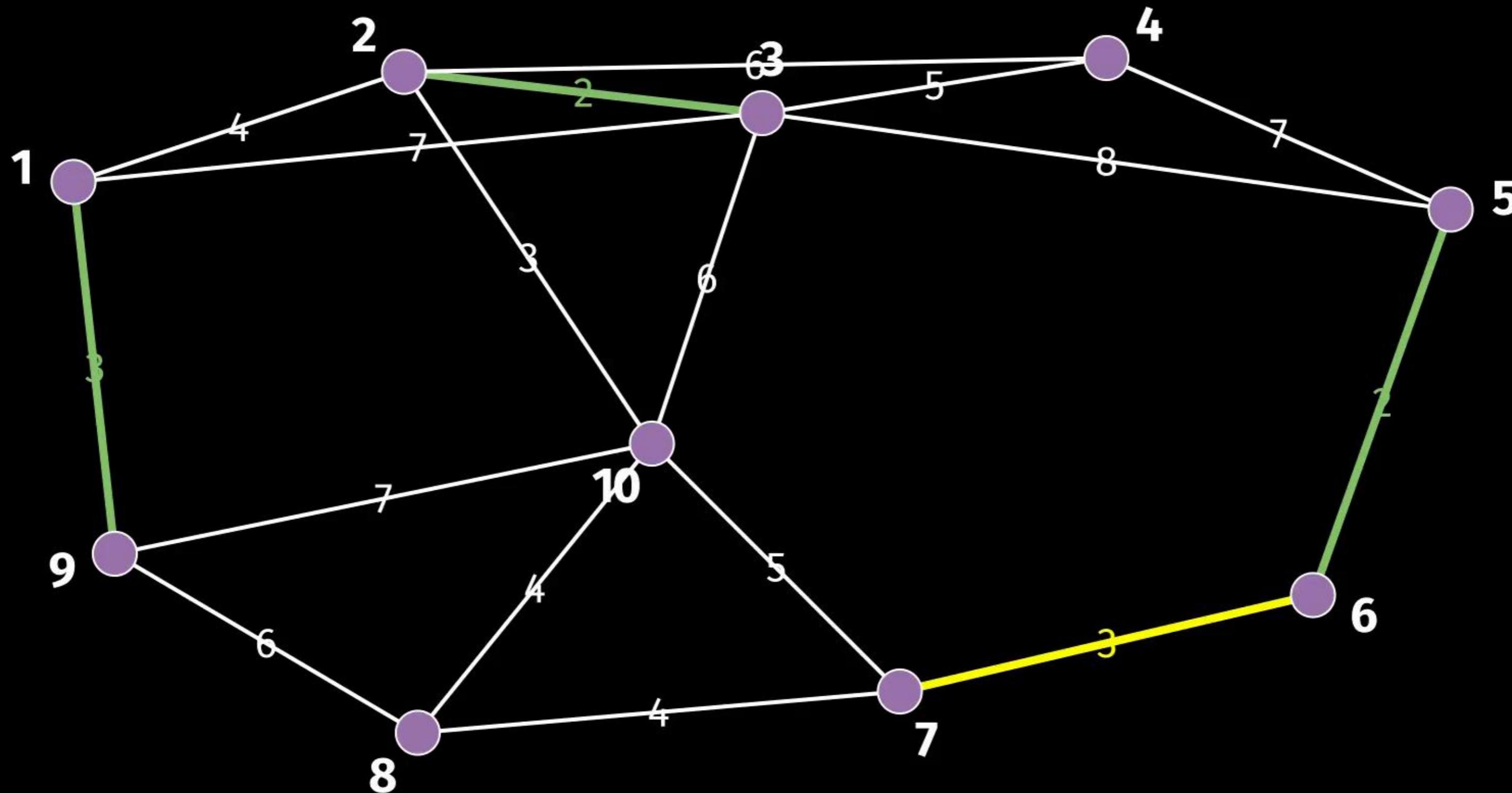
Minimum Spanning Tree (Kruskal)



Peso total MST: 7

Aceptada

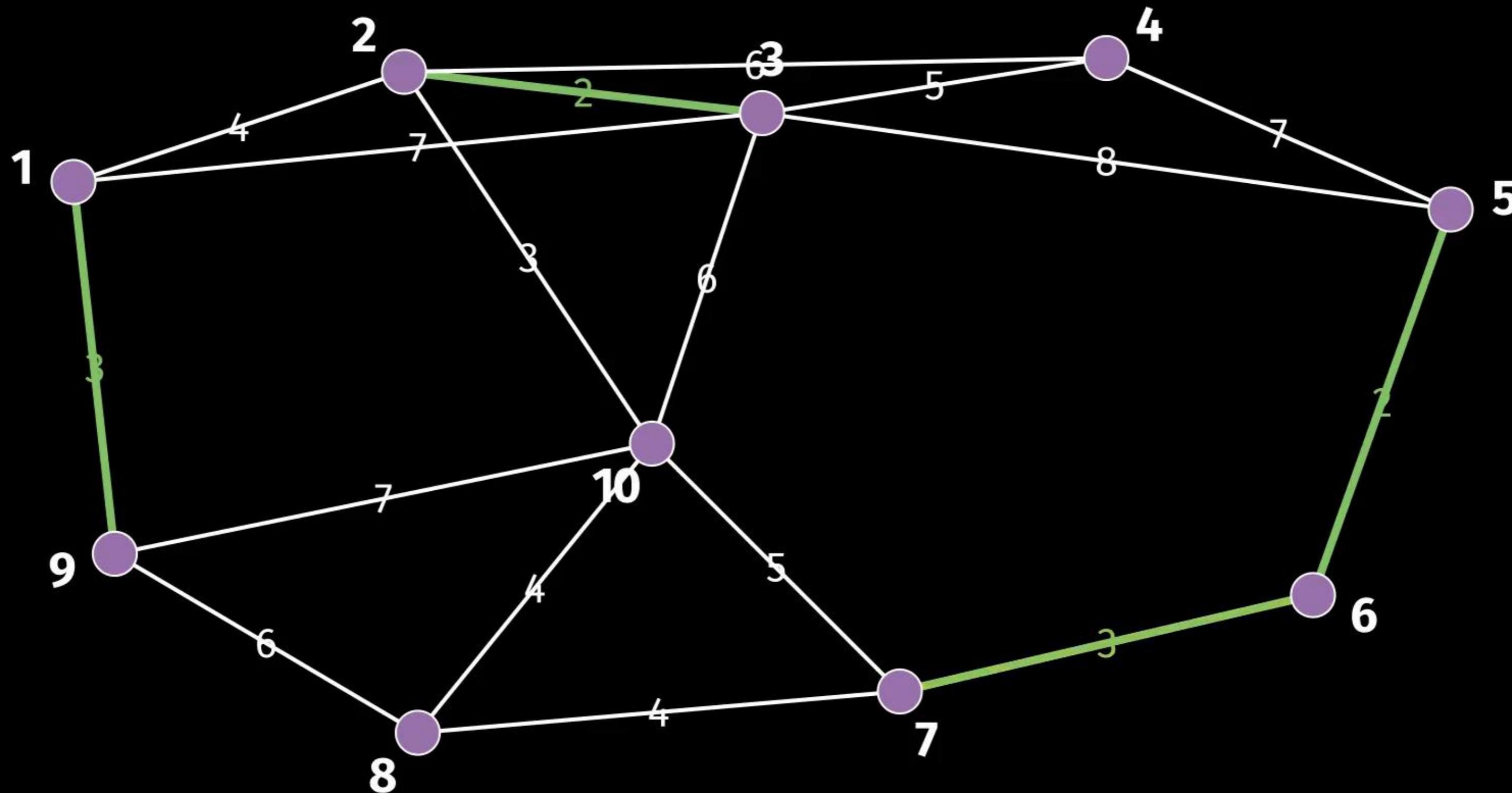
Minimum Spanning Tree (Kruskal)



Peso total MST: 7

Candidata: (7, 6) con peso 3

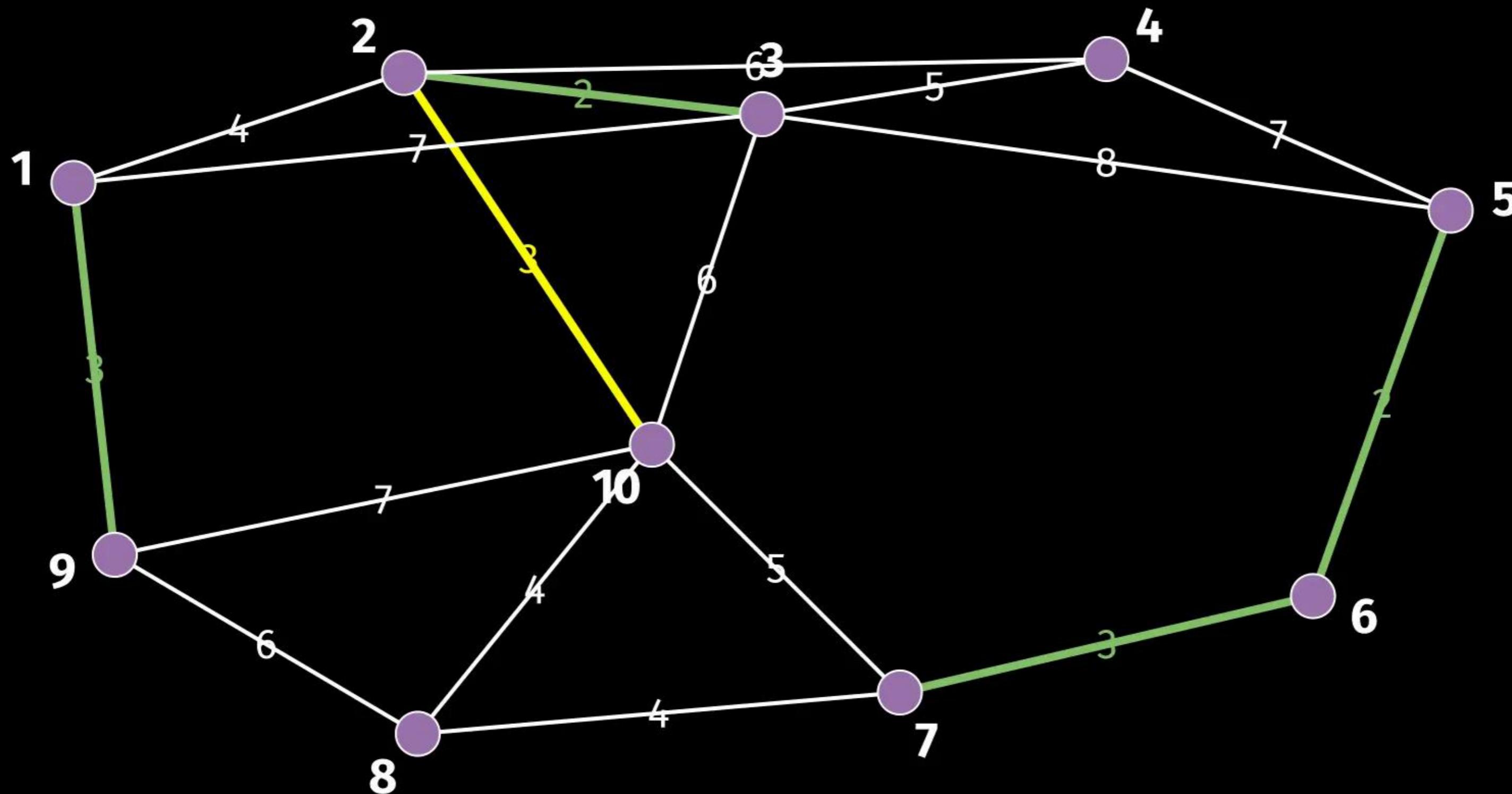
Minimum Spanning Tree (Kruskal)



Peso total MST: **10**

Aceptada

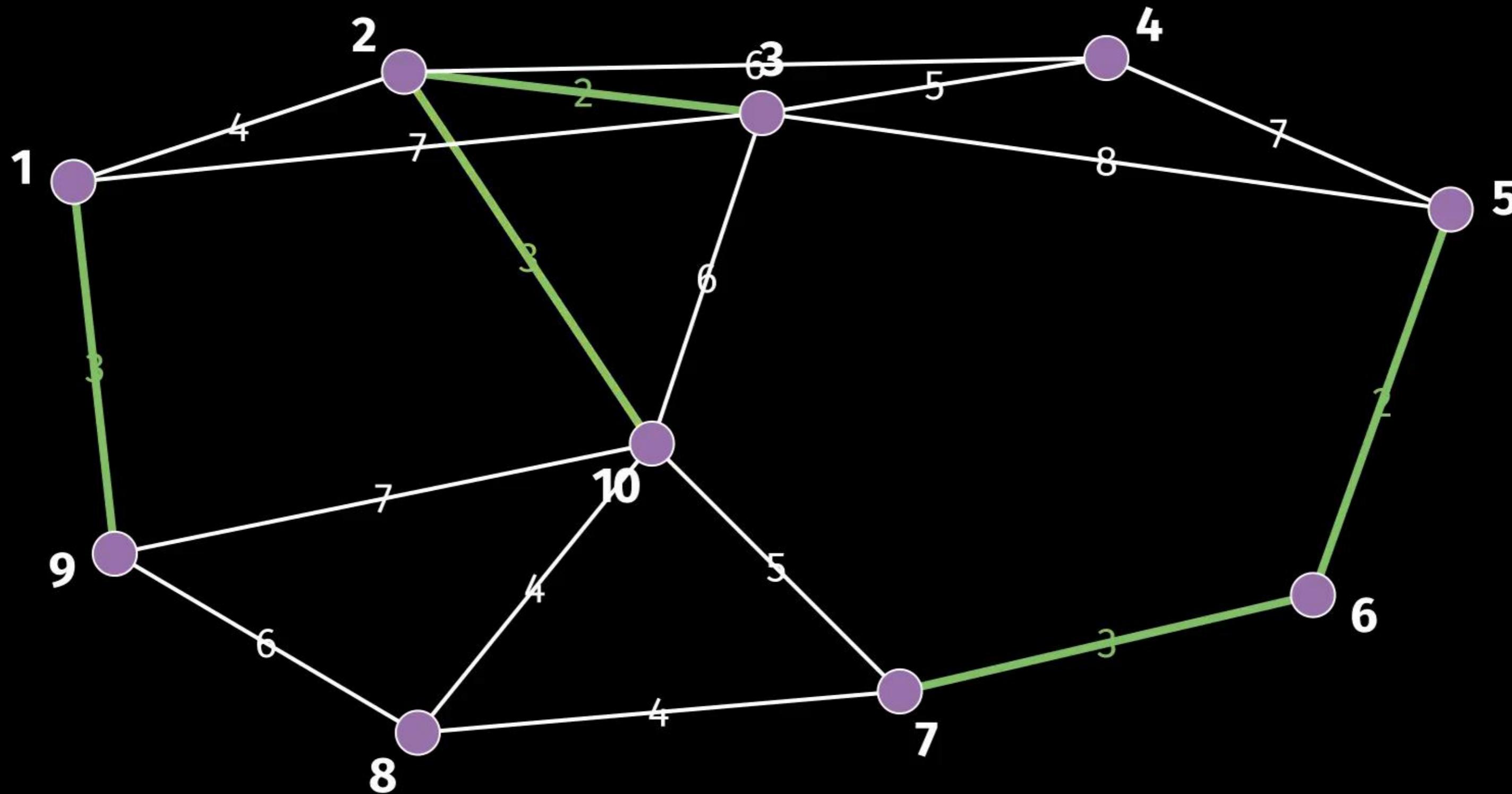
Minimum Spanning Tree (Kruskal)



Peso total MST: **10**

Candidata: (2, 10) con peso 3

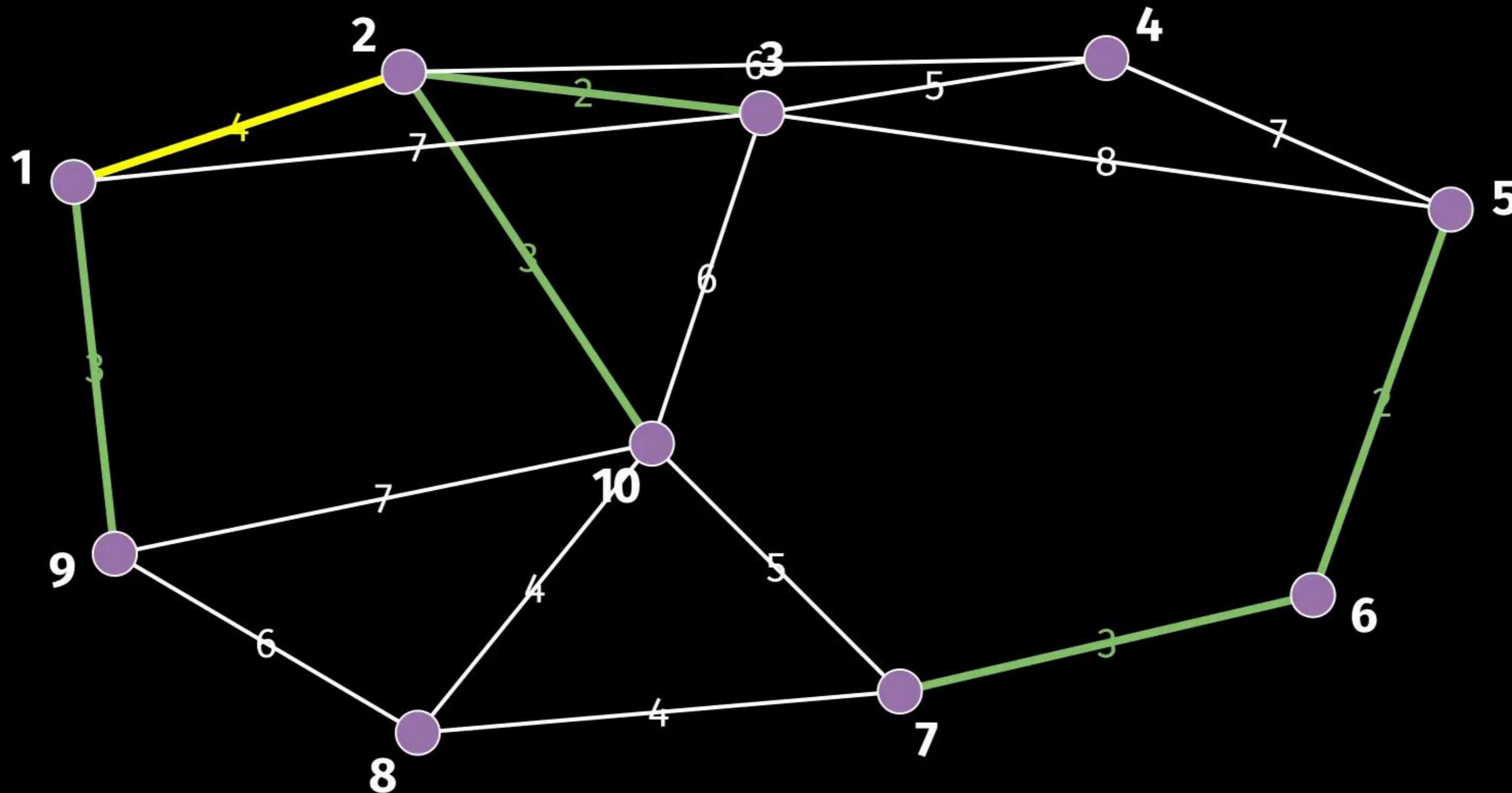
Minimum Spanning Tree (Kruskal)



Peso total MST: **13**

Aceptada

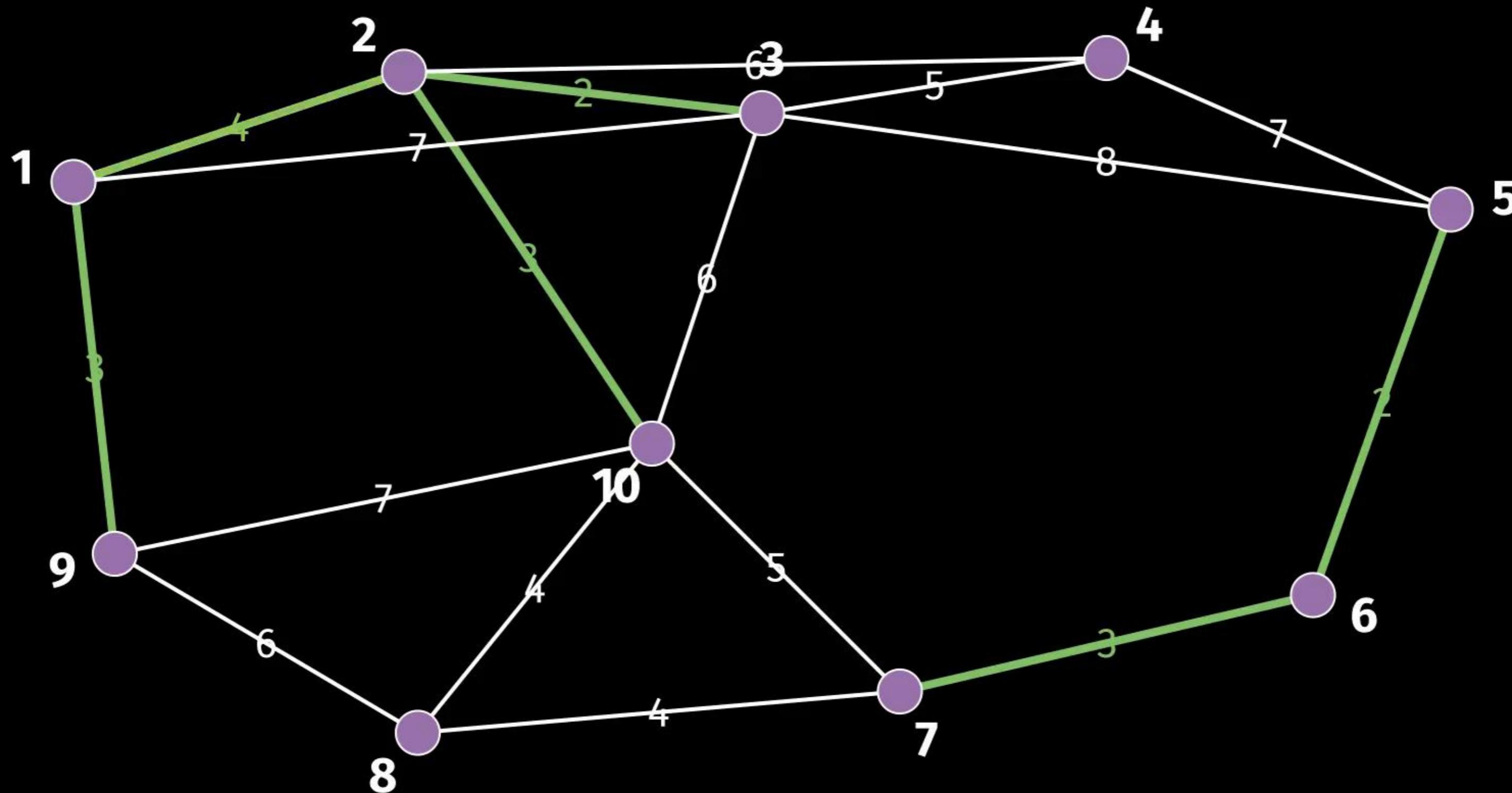
Minimum Spanning Tree (Kruskal)



Peso total MST: **13**

Candidata: (1, 2) con peso 4

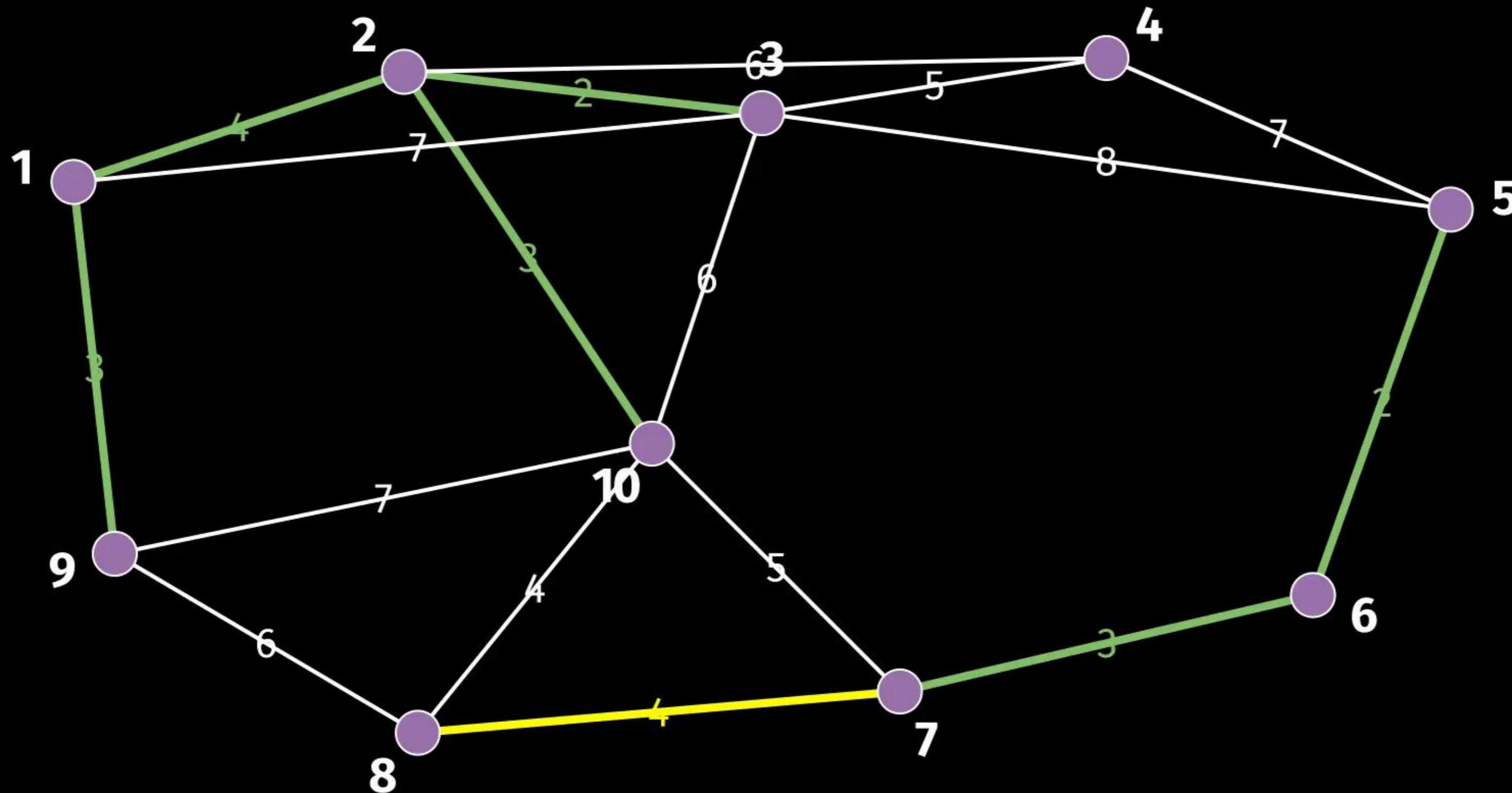
Minimum Spanning Tree (Kruskal)



Peso total MST: **17**

Aceptada

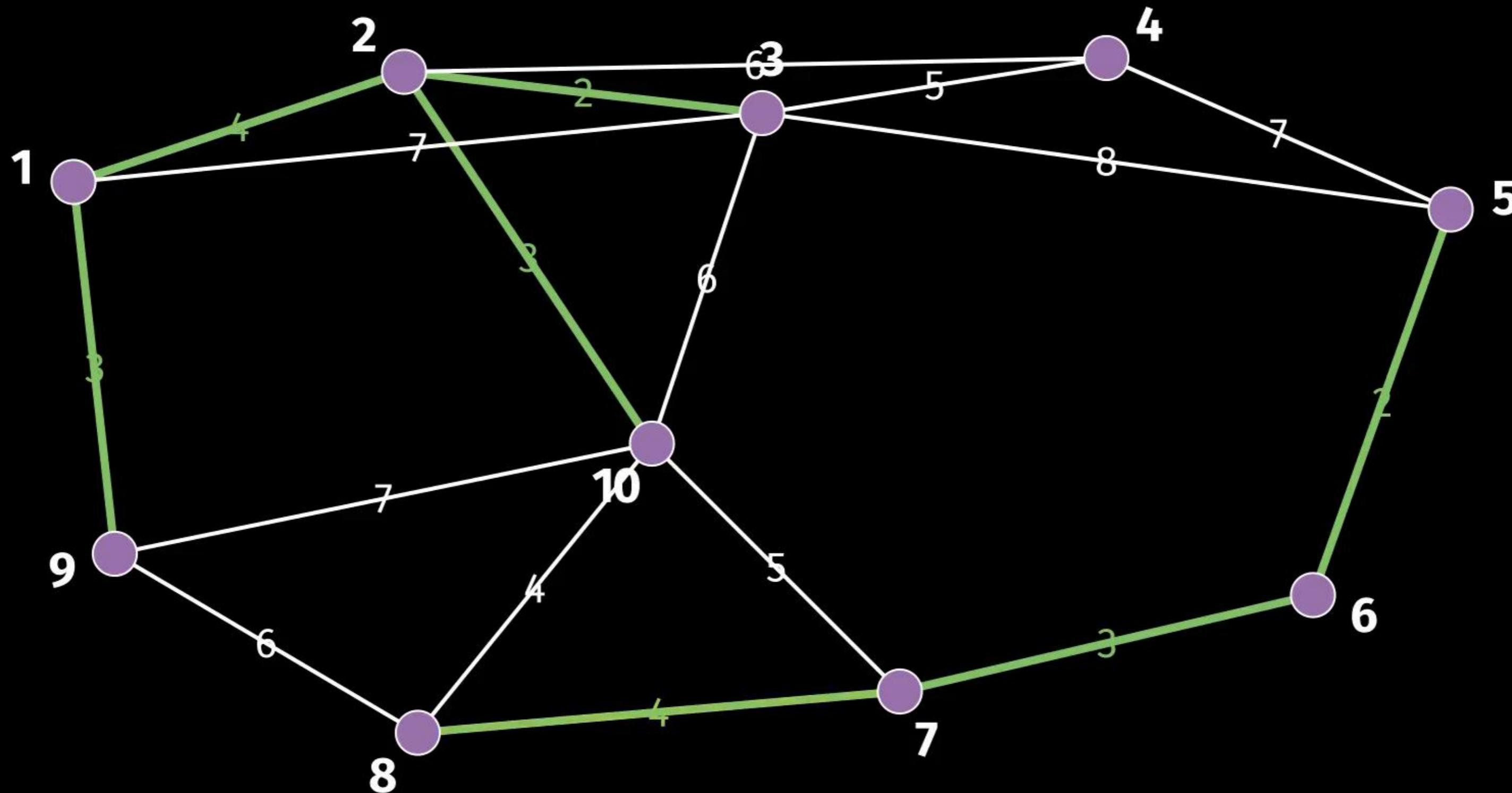
Minimum Spanning Tree (Kruskal)



Peso total MST: **17**

Candidata: (8, 7) con peso 4

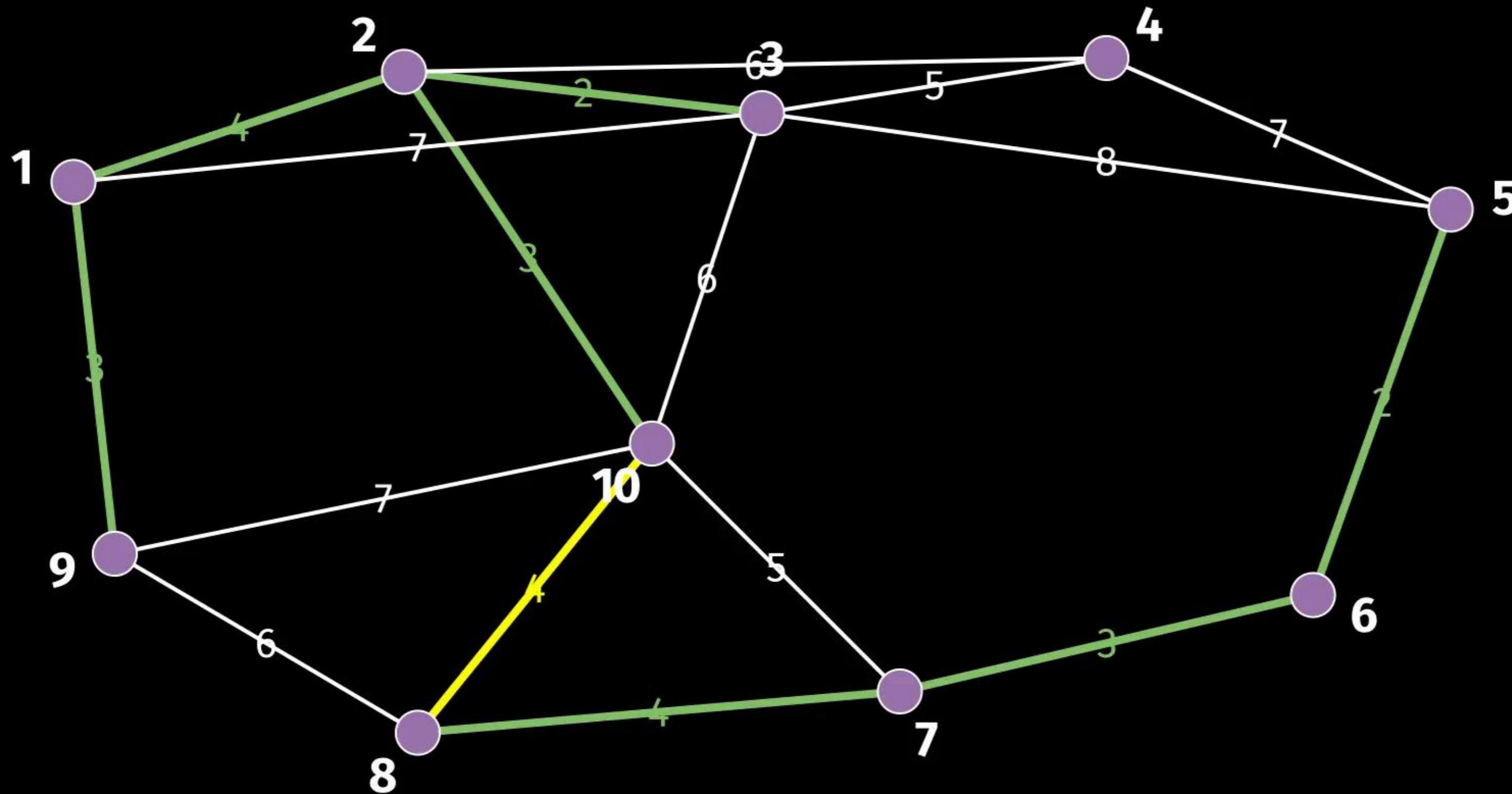
Minimum Spanning Tree (Kruskal)



Peso total MST: **21**

Aceptada

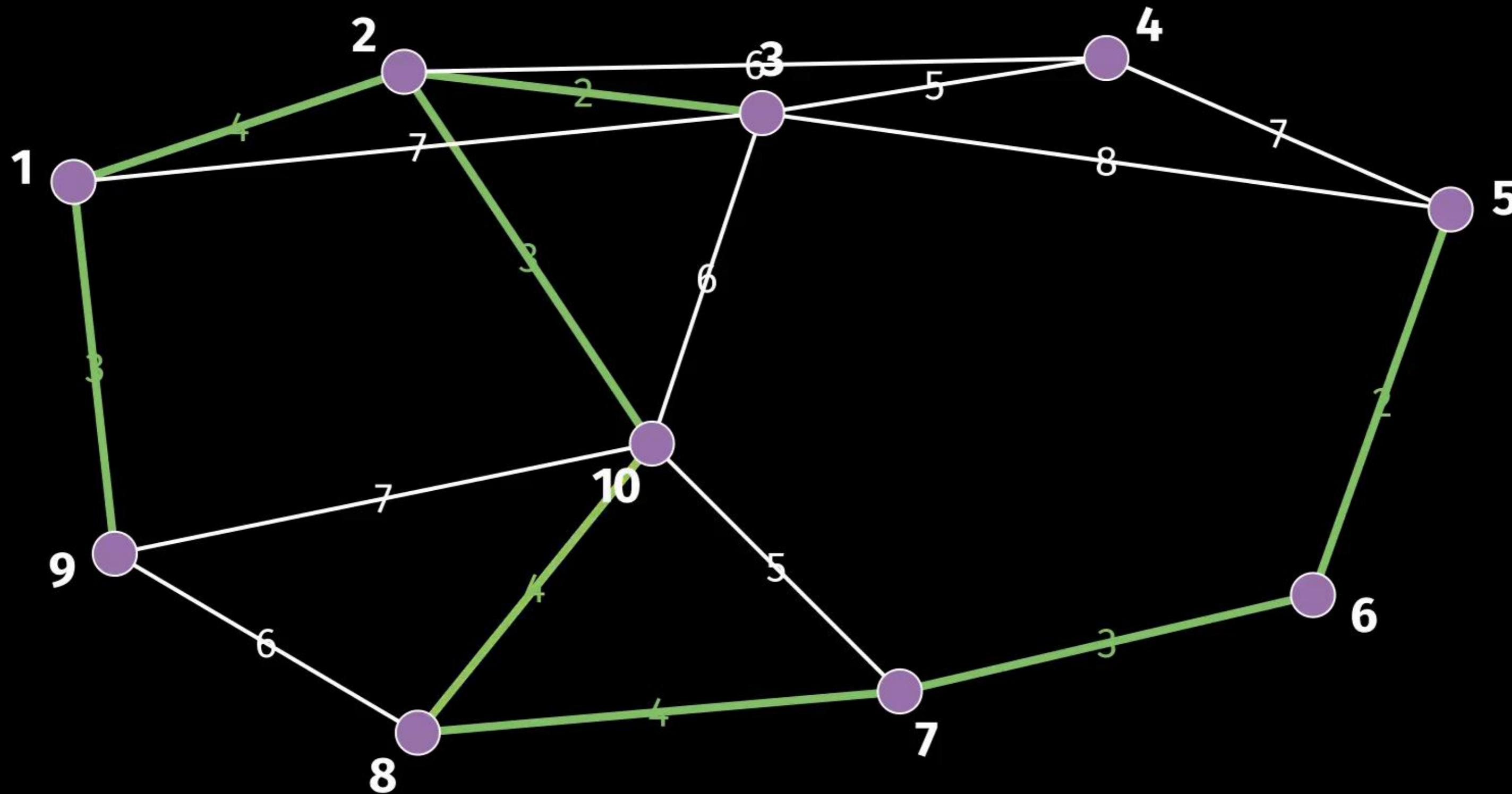
Minimum Spanning Tree (Kruskal)



Peso total MST: **21**

Candidata: (10, 8) con peso 4

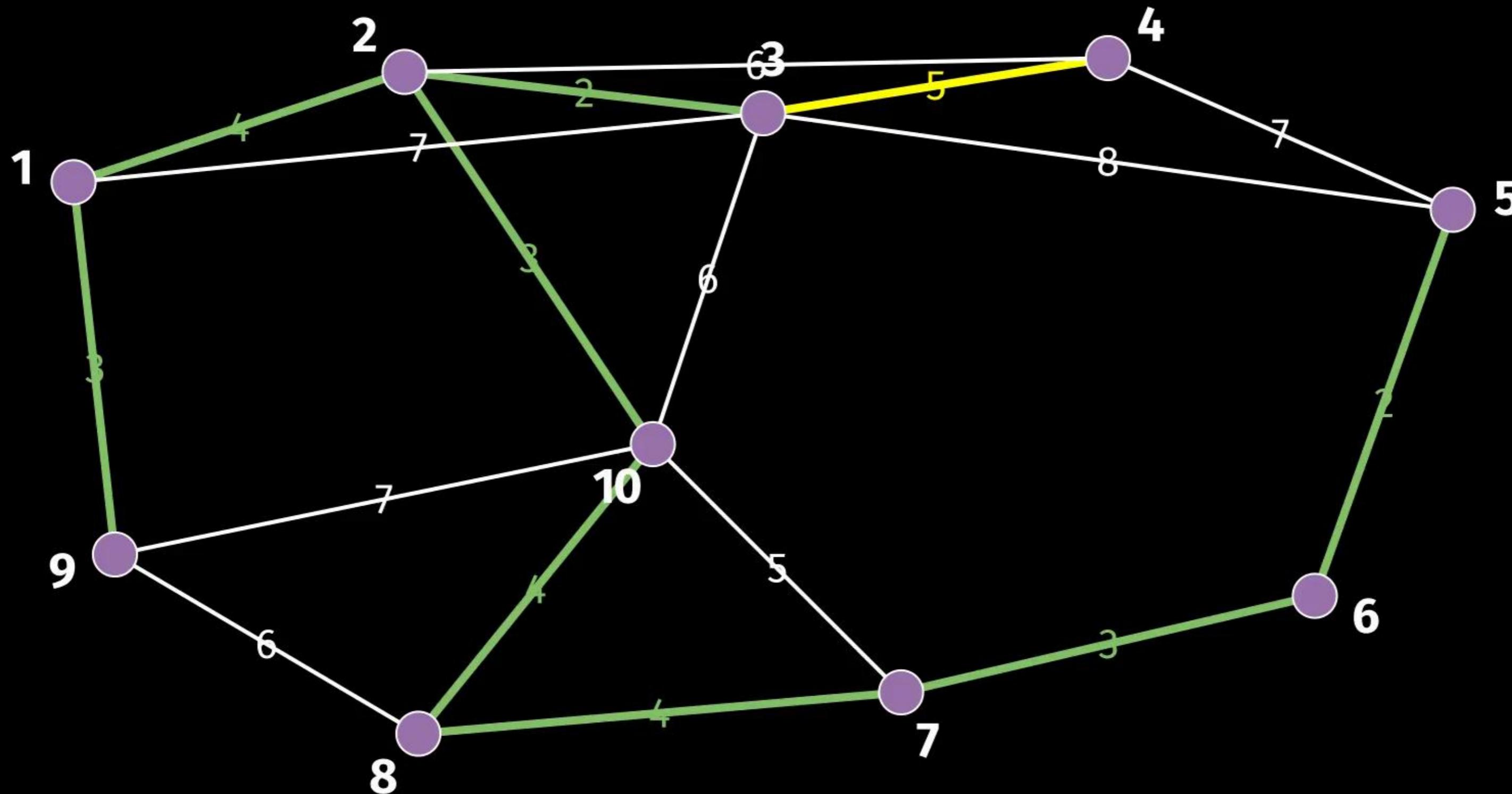
Minimum Spanning Tree (Kruskal)



Peso total MST: **25**

Aceptada

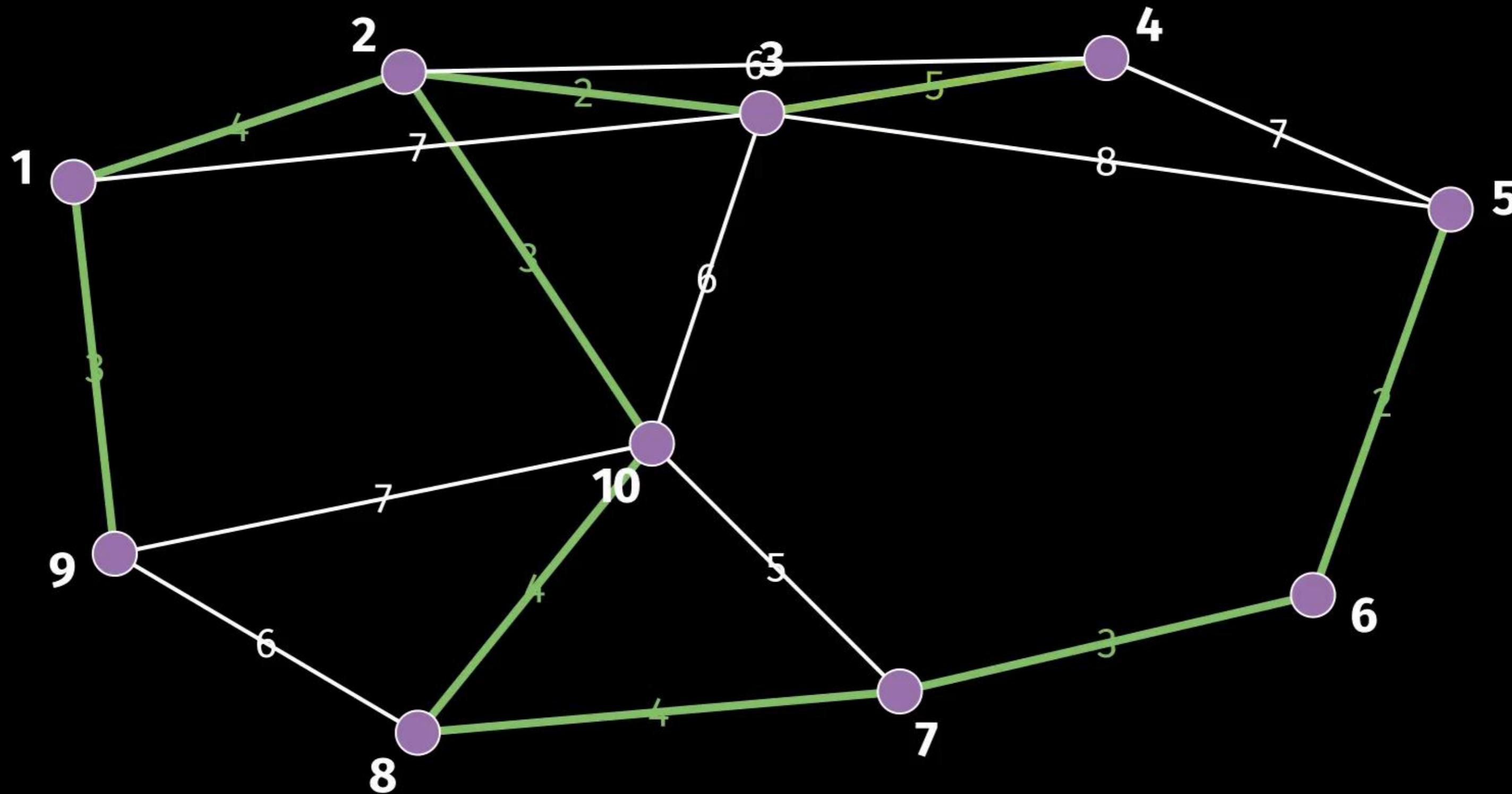
Minimum Spanning Tree (Kruskal)



Peso total MST: **25**

Candidata: (3, 4) con peso 5

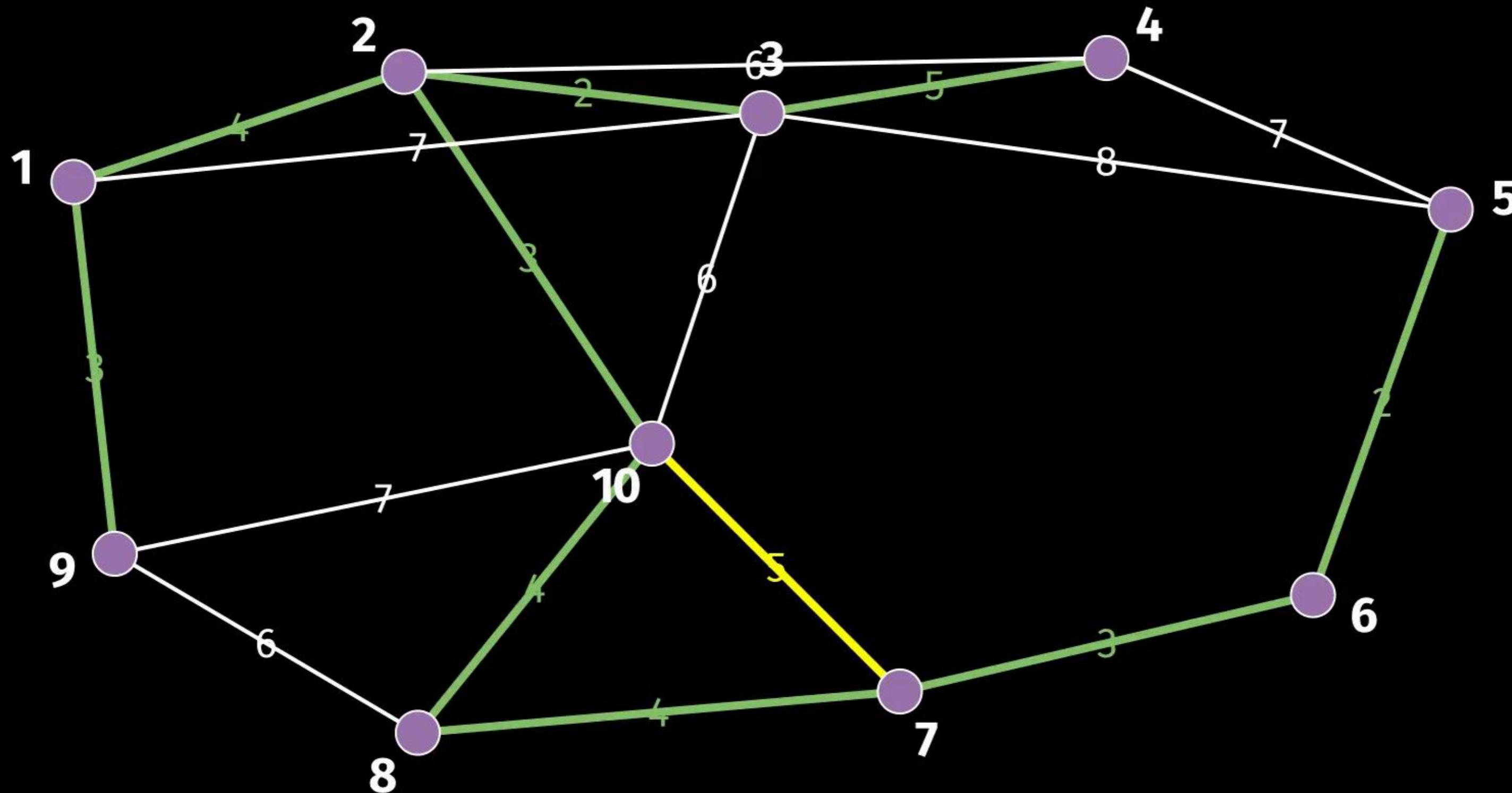
Minimum Spanning Tree (Kruskal)



Peso total MST: **30**

Aceptada

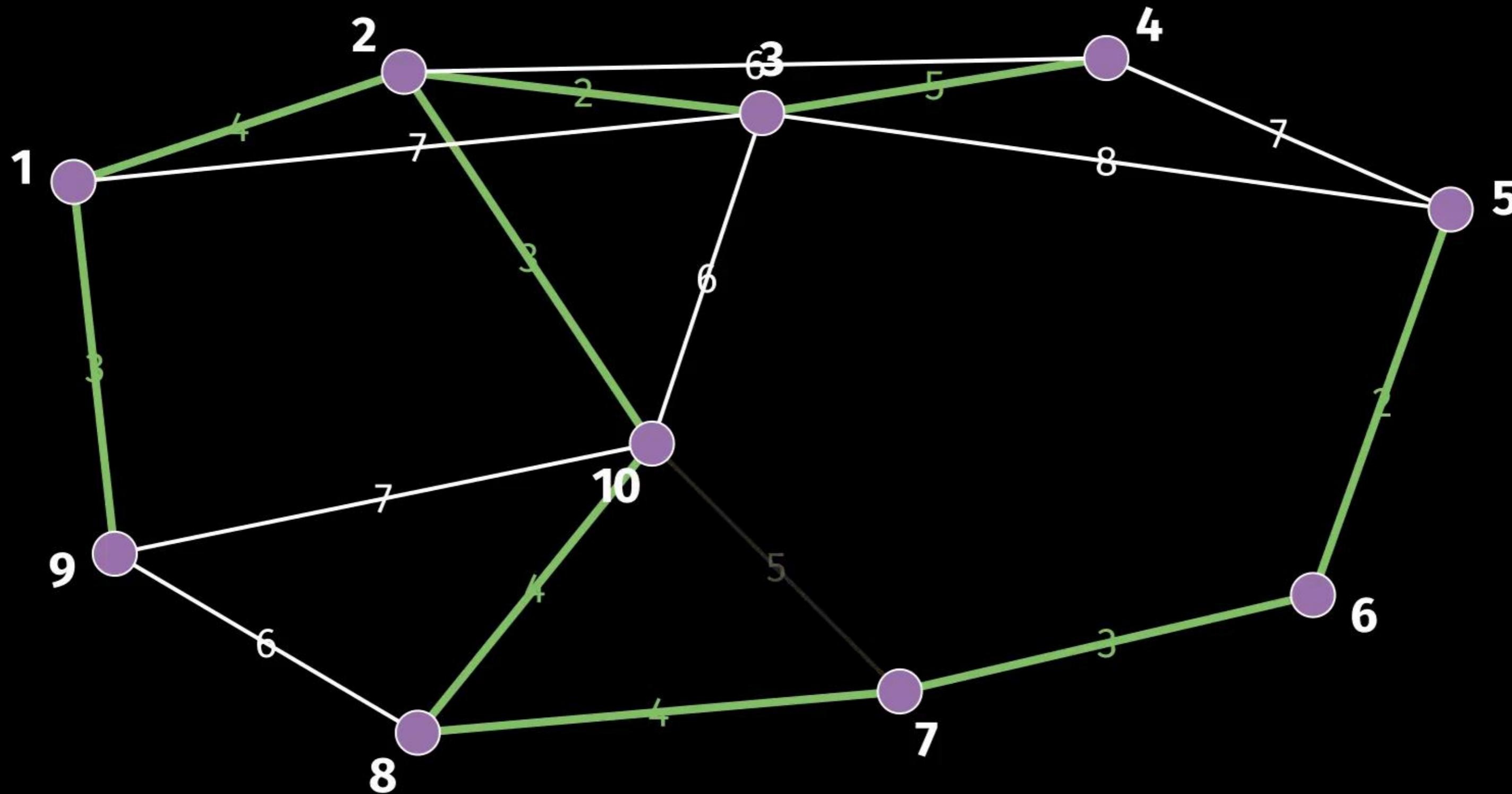
Minimum Spanning Tree (Kruskal)



Peso total MST: **30**

Candidata: (10, 7) con peso 5

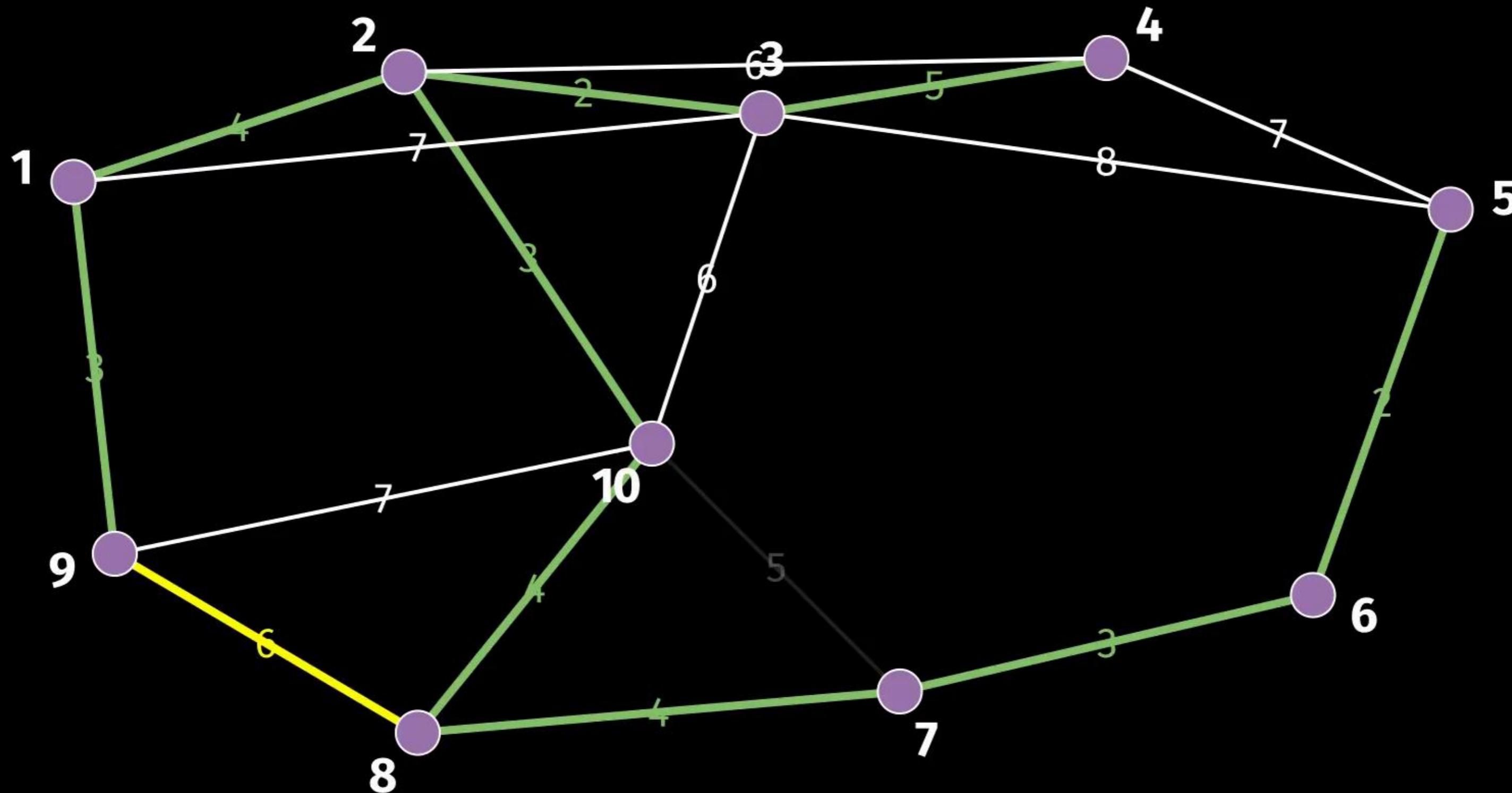
Minimum Spanning Tree (Kruskal)



Peso total MST: **30**

Rechazada (formaría un ciclo)

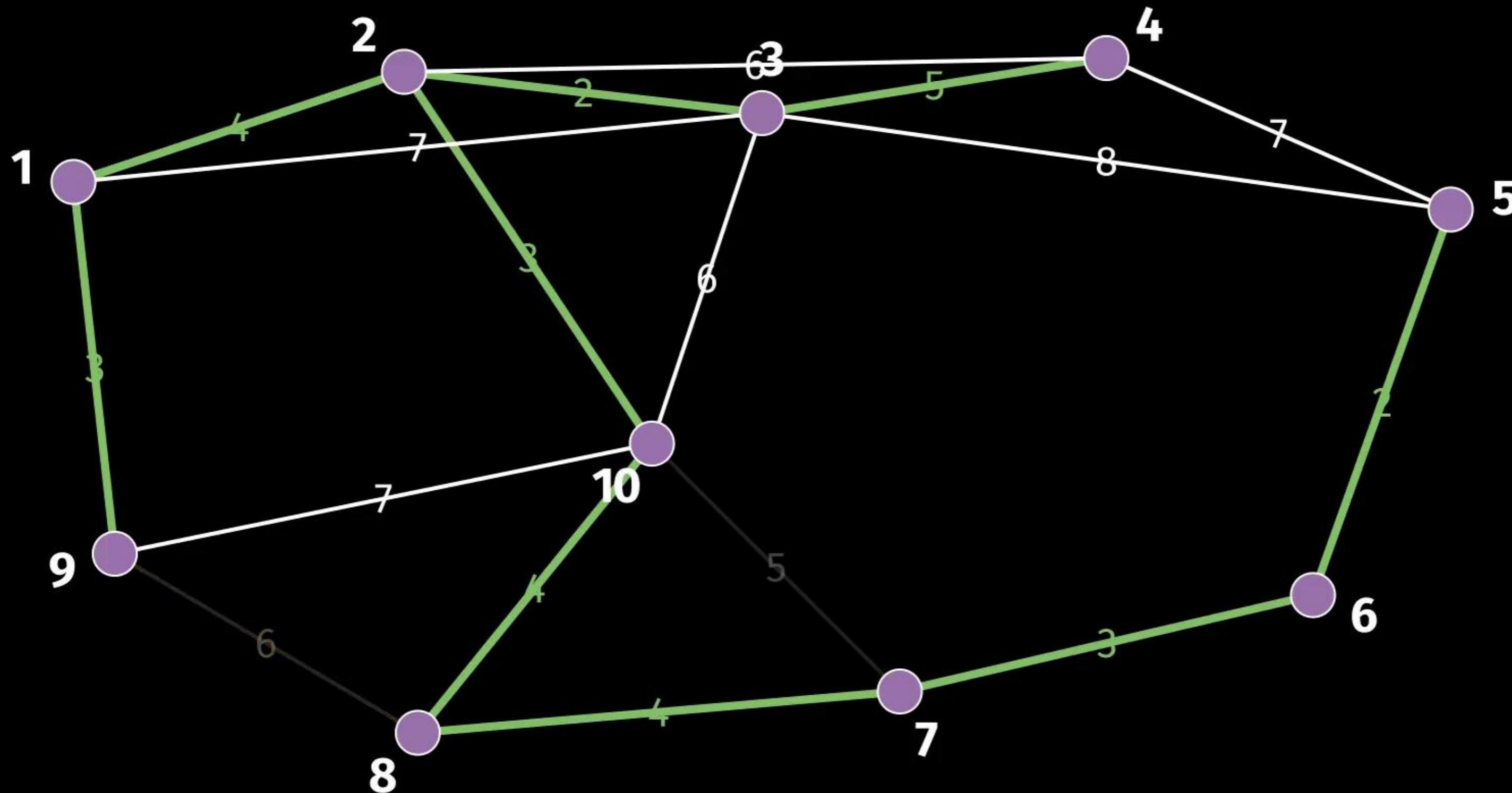
Minimum Spanning Tree (Kruskal)



Peso total MST: **30**

Candidata: (9, 8) con peso 6

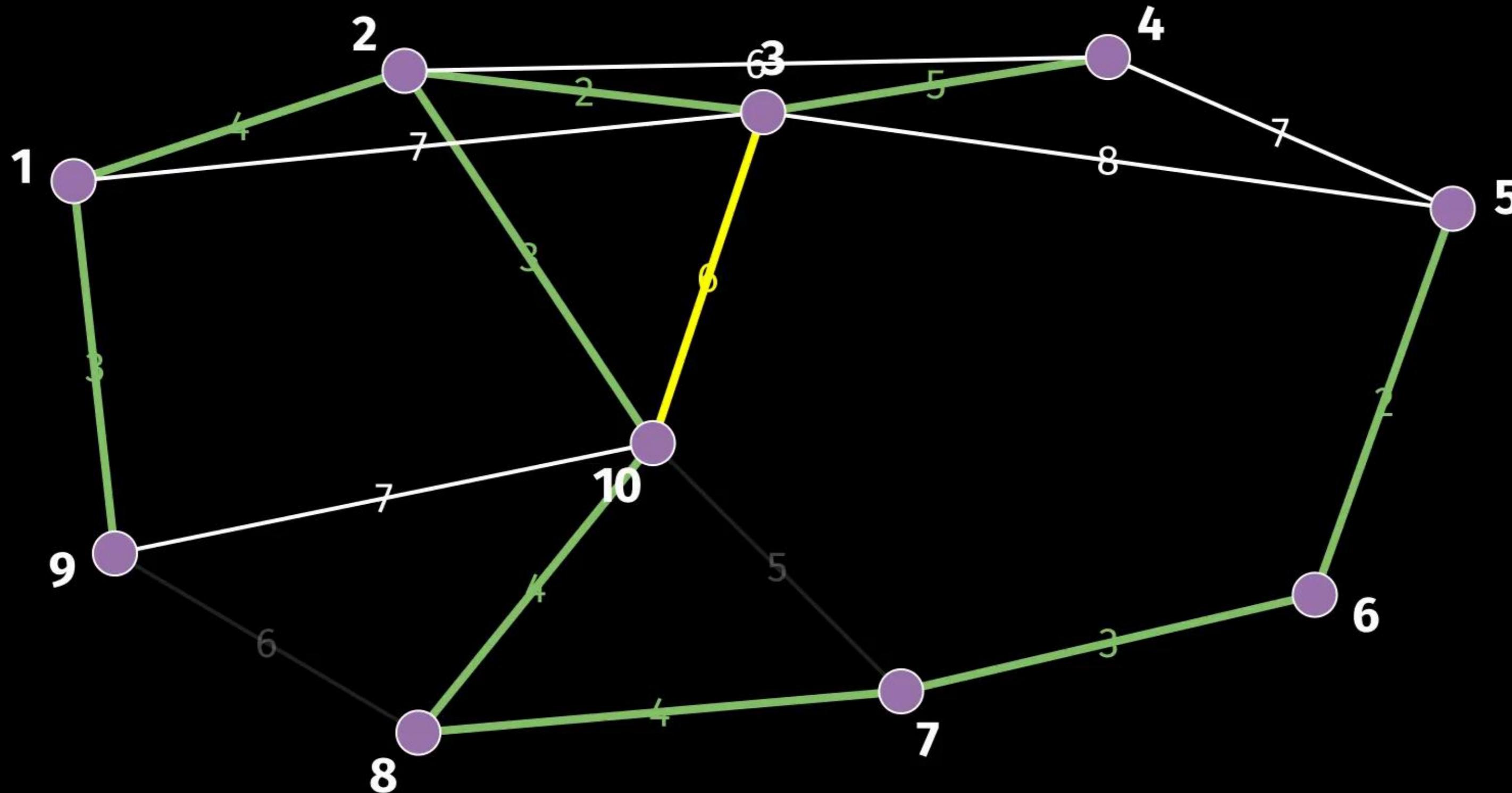
Minimum Spanning Tree (Kruskal)



Peso total MST: **30**

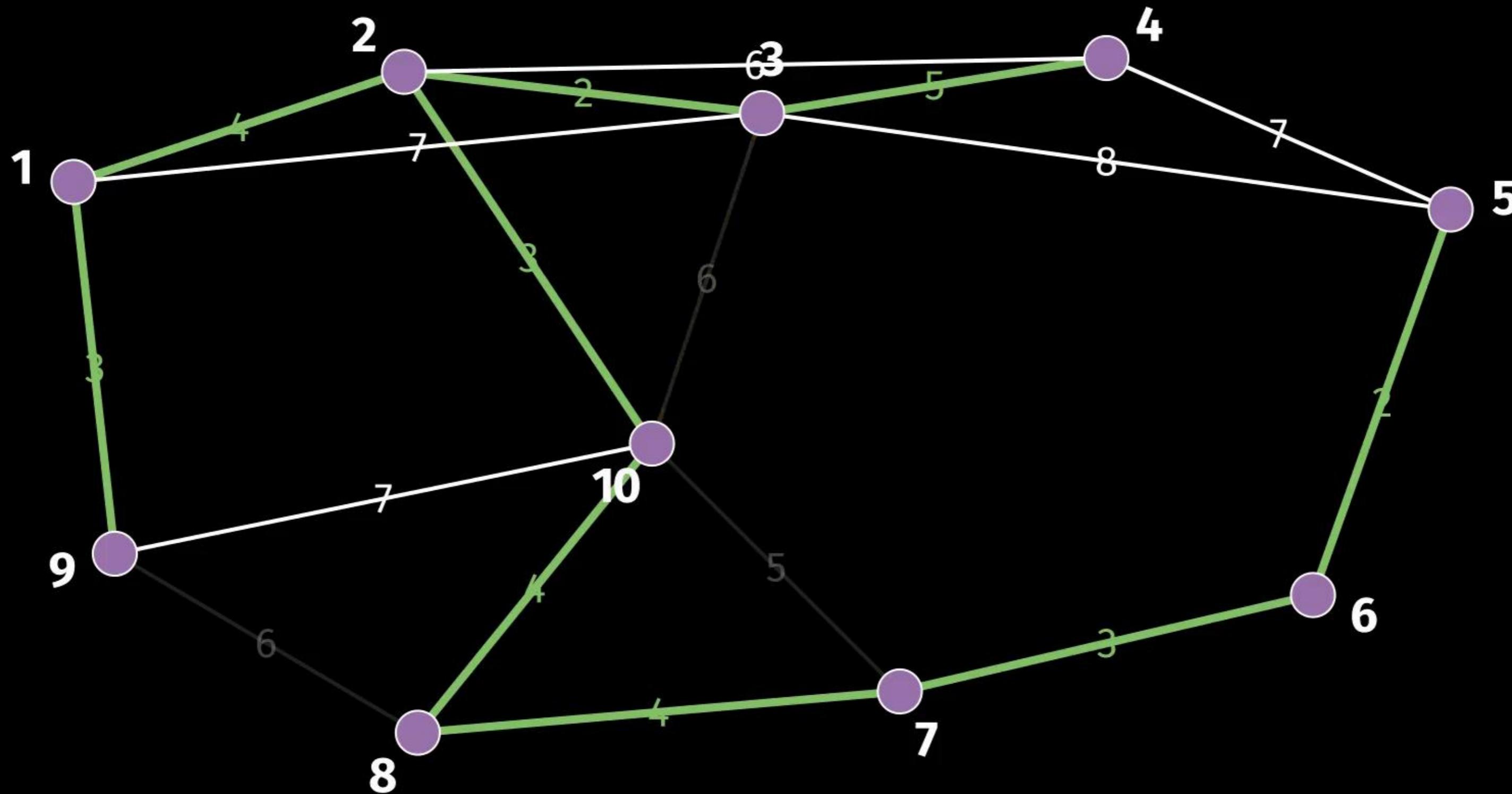
Rechazada (formaría un ciclo)

Minimum Spanning Tree (Kruskal)



Candidata: (10, 3) con peso 6

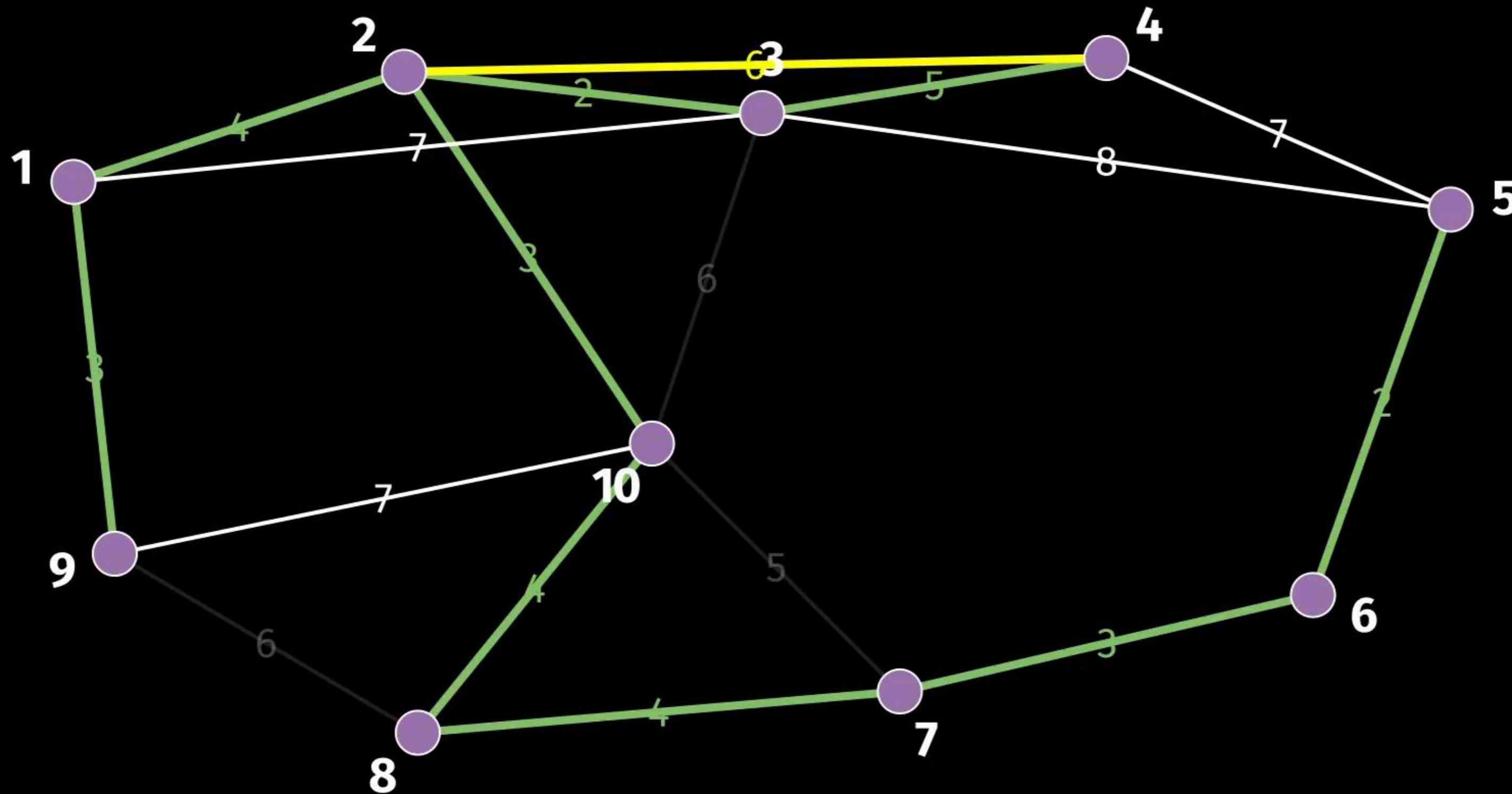
Minimum Spanning Tree (Kruskal)



Peso total MST: **30**

Rechazada (formaría un ciclo)

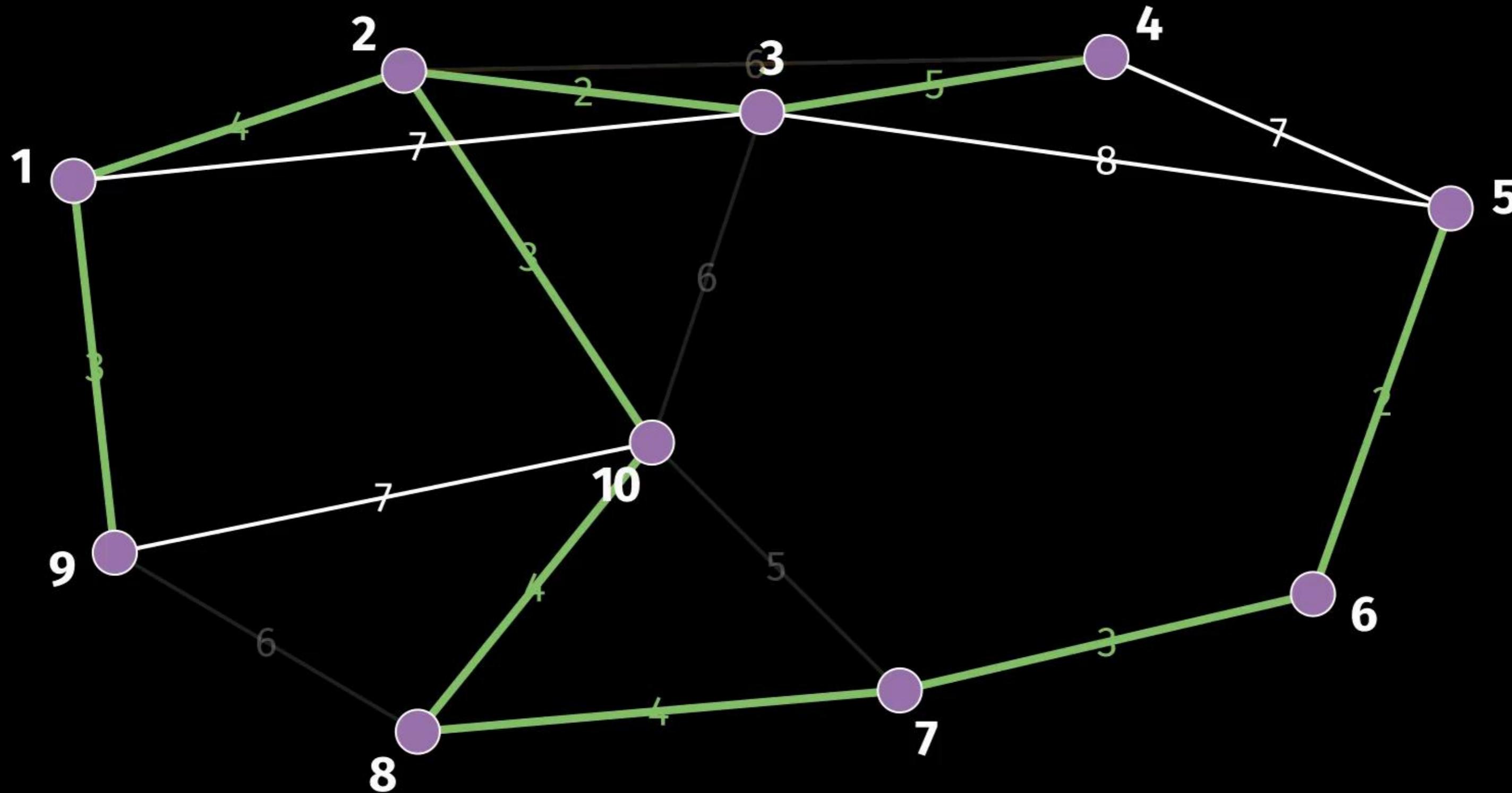
Minimum Spanning Tree (Kruskal)



Peso total MST: **30**

Candidata: (2, 4) con peso 6

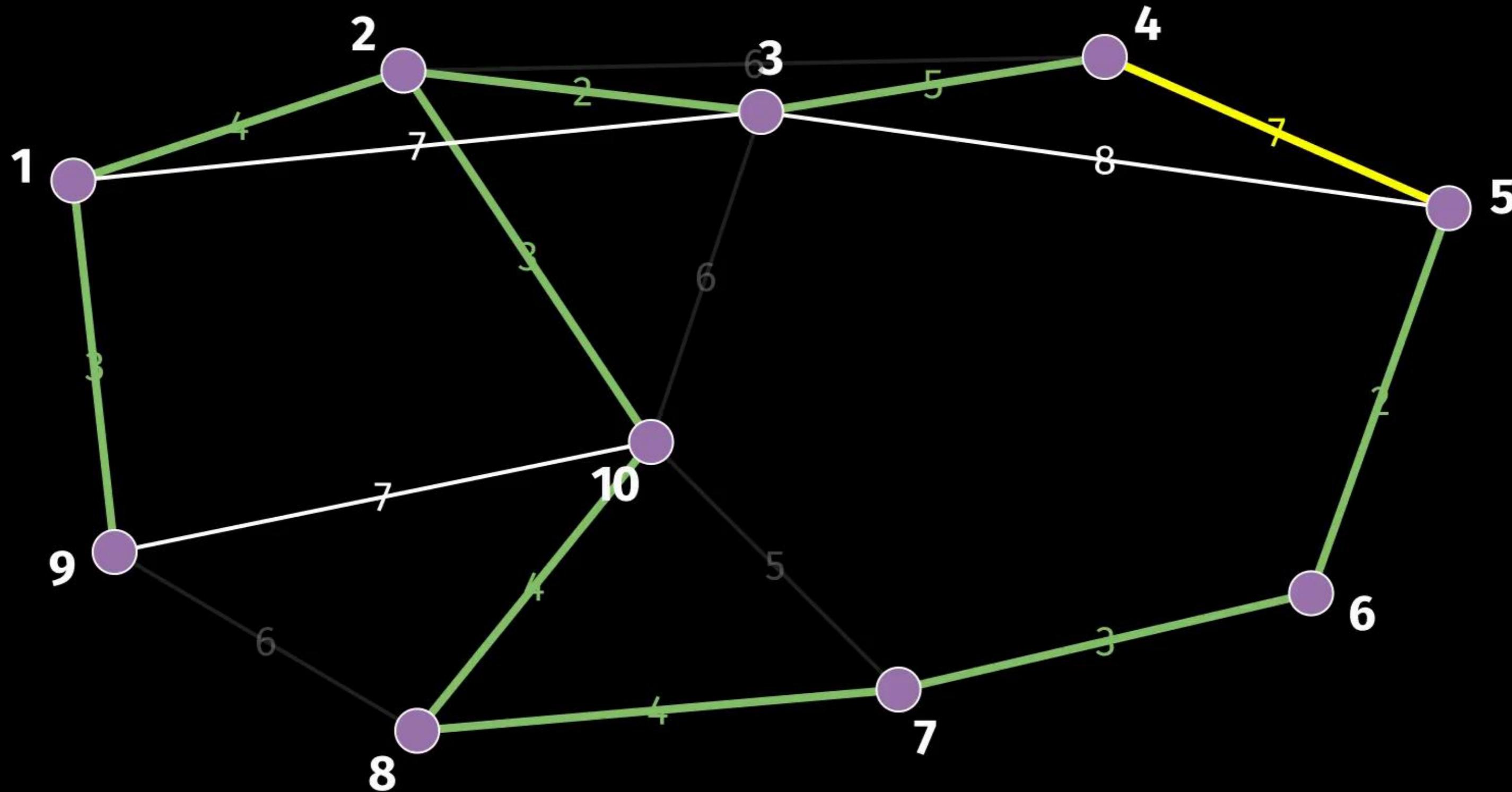
Minimum Spanning Tree (Kruskal)



Peso total MST: **30**

Rechazada (formaría un ciclo)

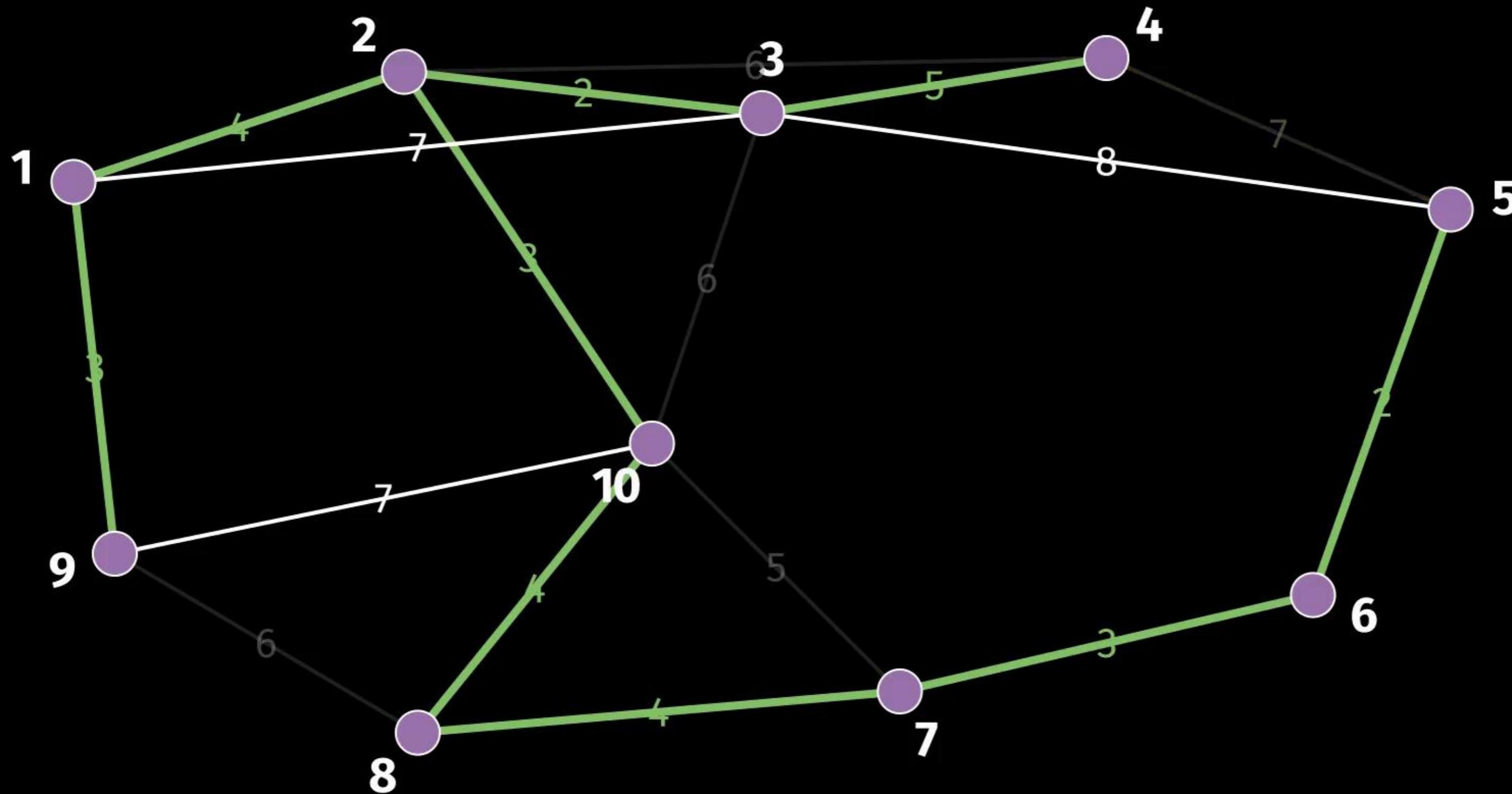
Minimum Spanning Tree (Kruskal)



Peso total MST: **30**

Candidata: (4, 5) con peso 7

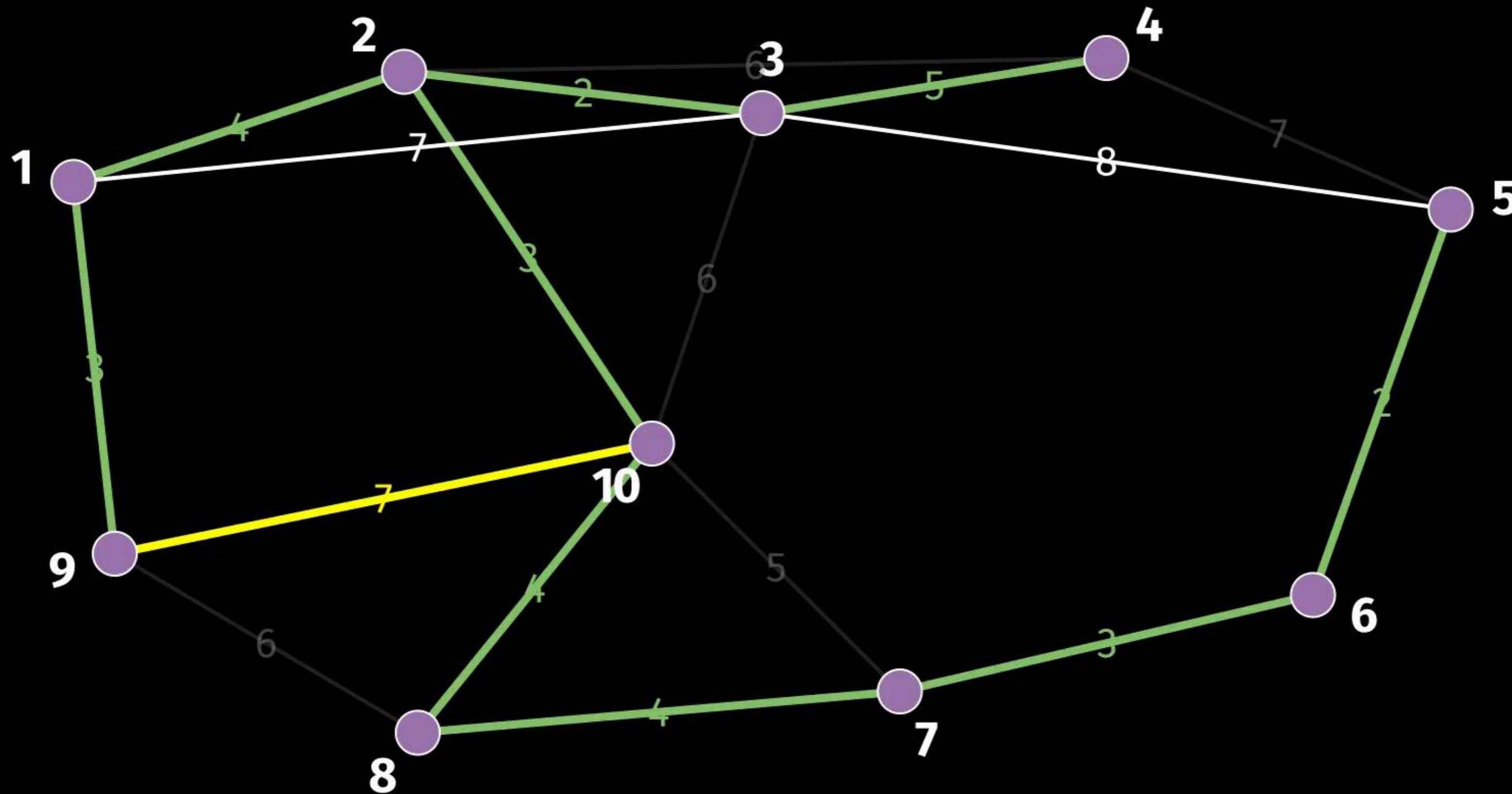
Minimum Spanning Tree (Kruskal)



Peso total MST: **30**

Rechazada (formaría un ciclo)

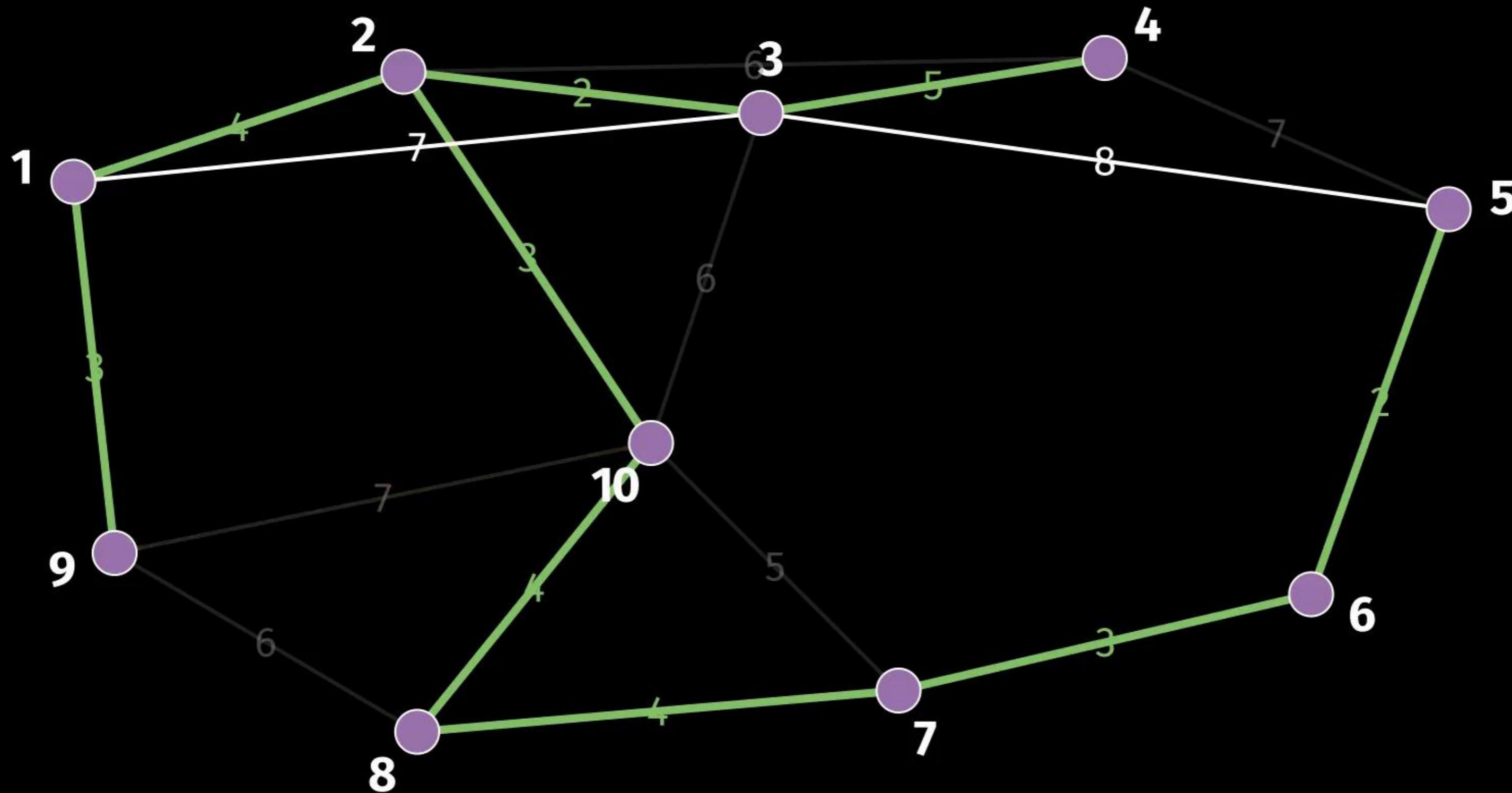
Minimum Spanning Tree (Kruskal)



Peso total MST: **30**

Candidata: (9, 10) con peso 7

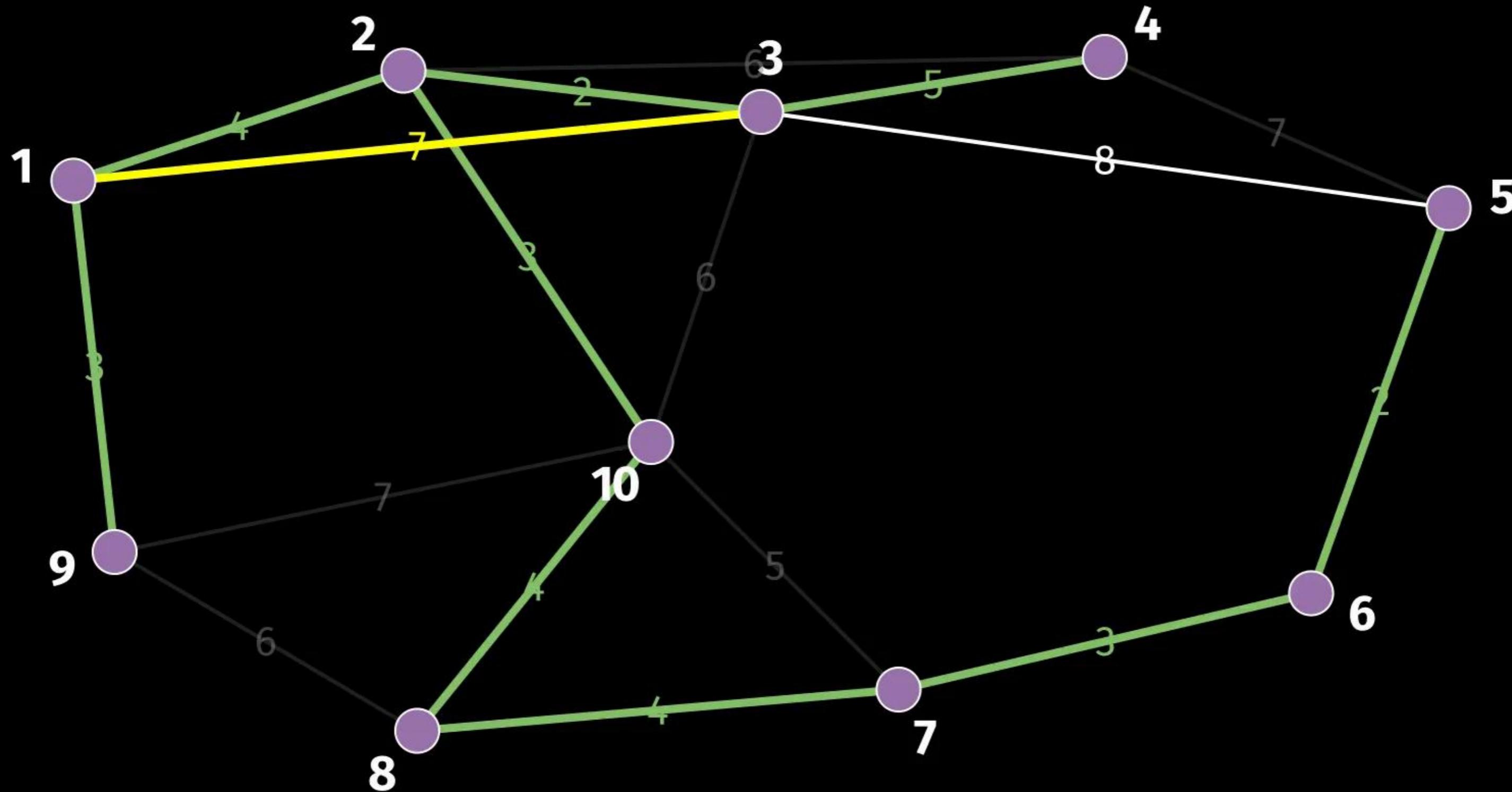
Minimum Spanning Tree (Kruskal)



Peso total MST: **30**

Rechazada (formaría un ciclo)

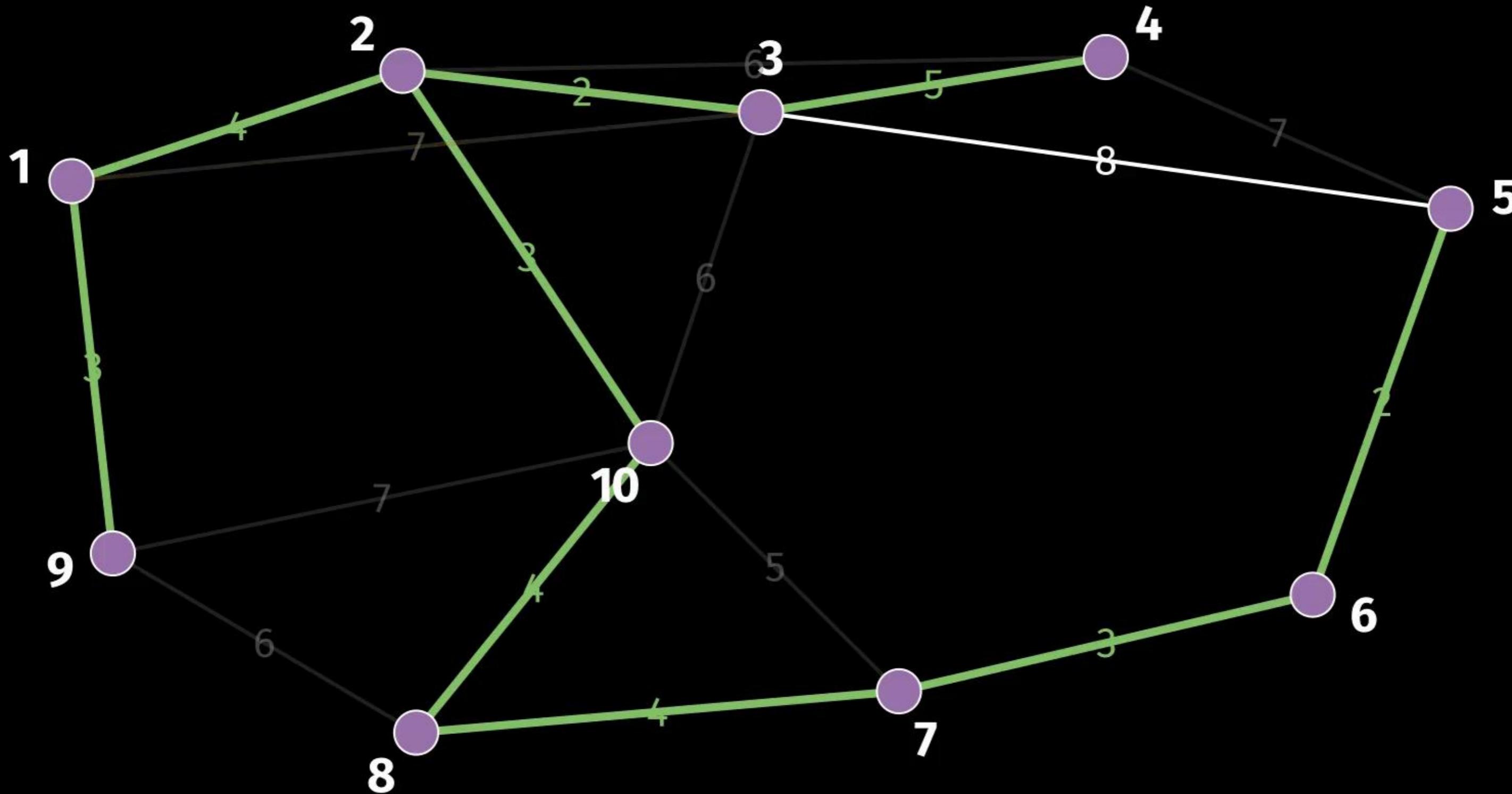
Minimum Spanning Tree (Kruskal)



Peso total MST: **30**

Candidata: (1, 3) con peso 7

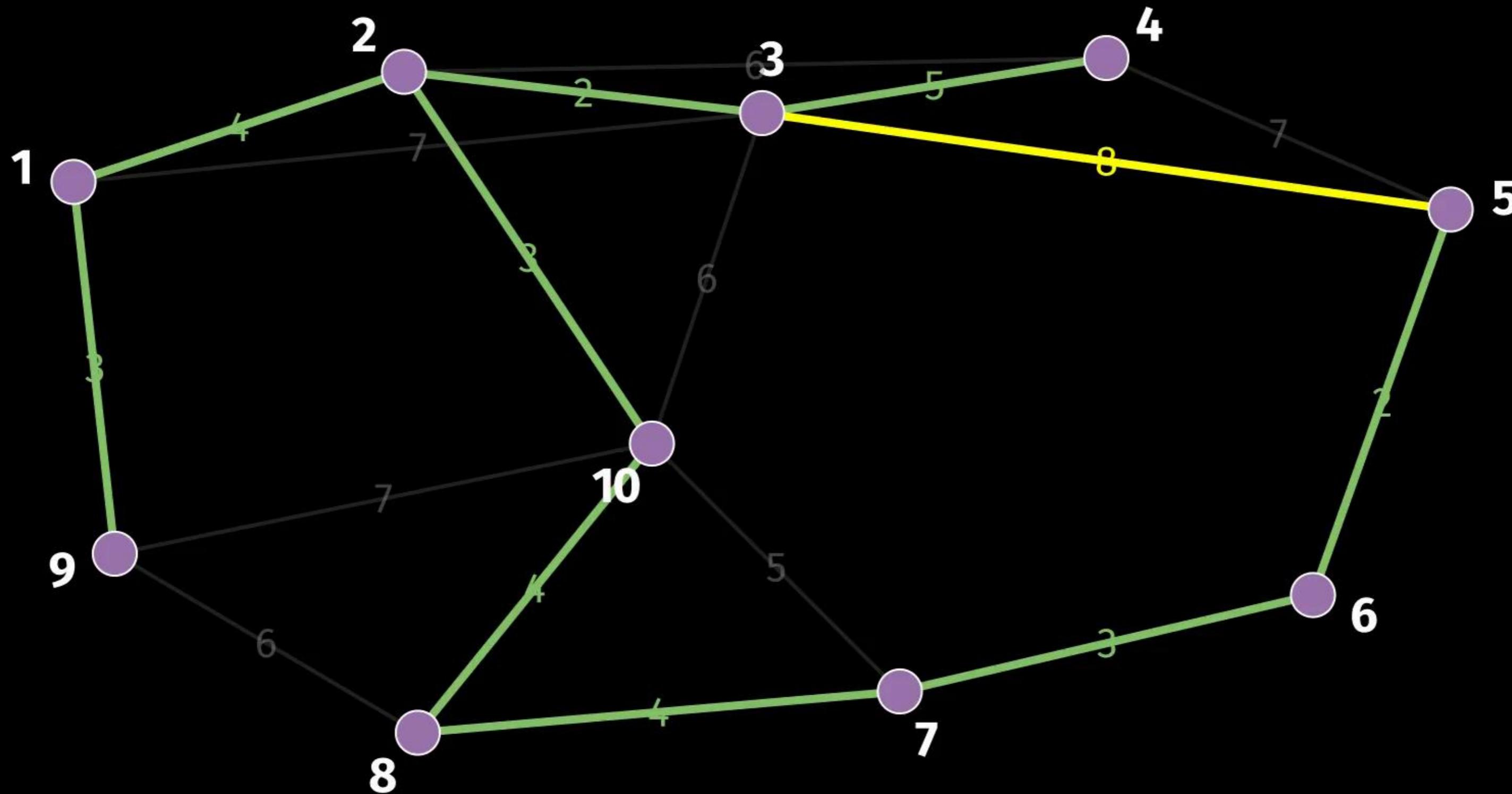
Minimum Spanning Tree (Kruskal)



Peso total MST: 30

Rechazada (formaría un ciclo)

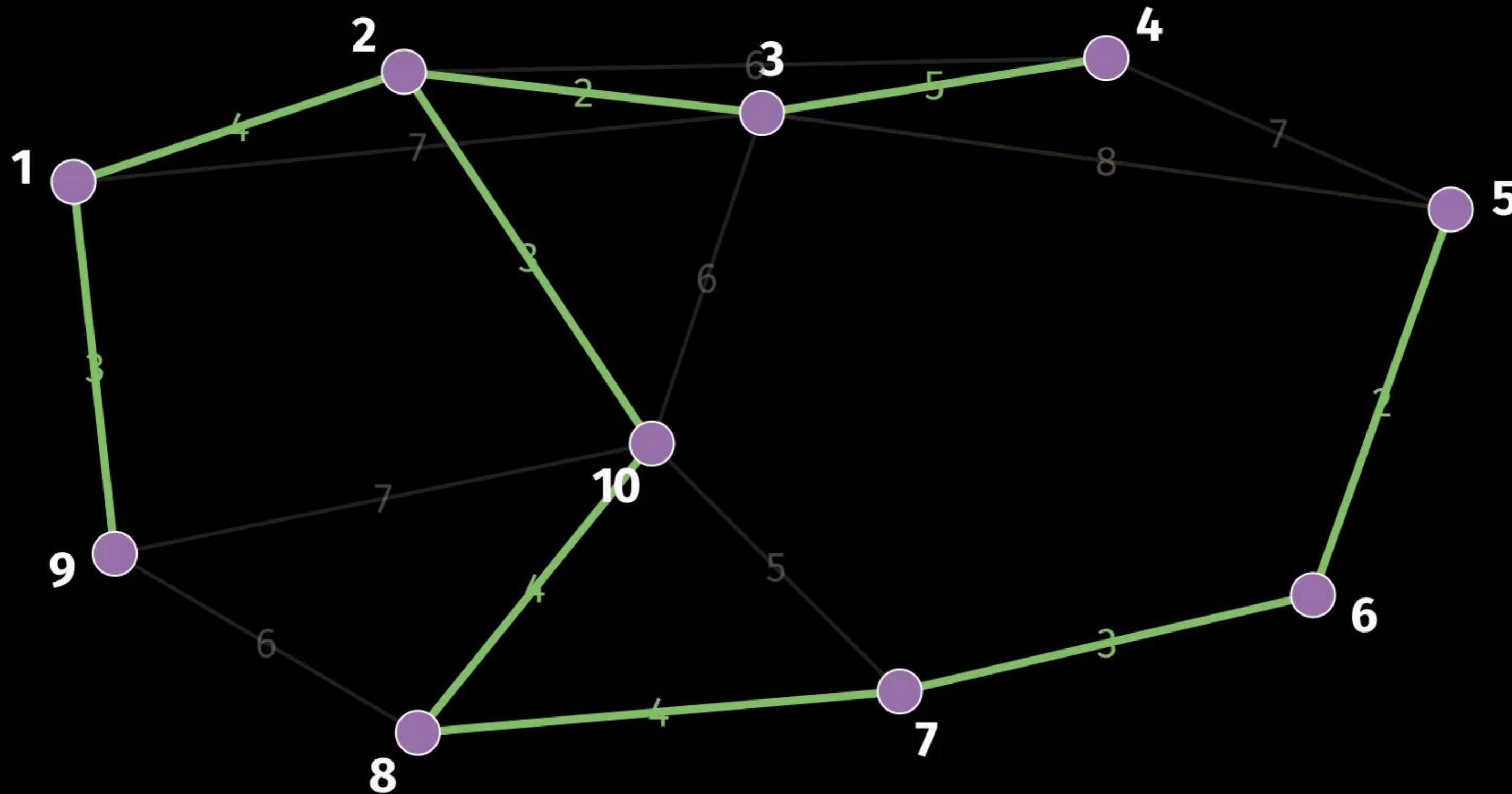
Minimum Spanning Tree (Kruskal)



Peso total MST: **30**

Candidata: (3, 5) con peso 8

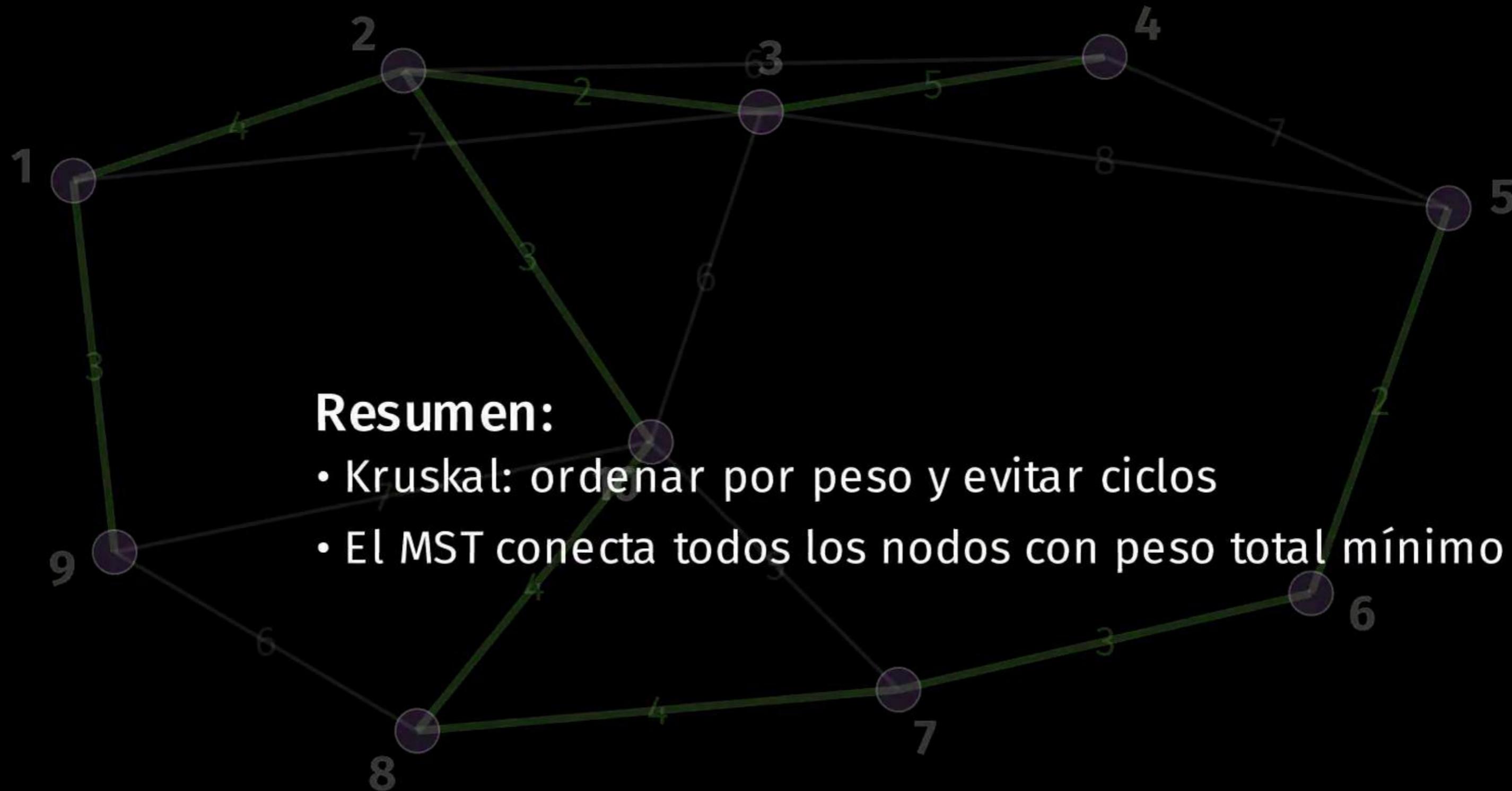
Minimum Spanning Tree (Kruskal)



Peso total MST: **30**

Rechazada (formaría un ciclo)

Minimum Spanning Tree (Kruskal)



Resumen:

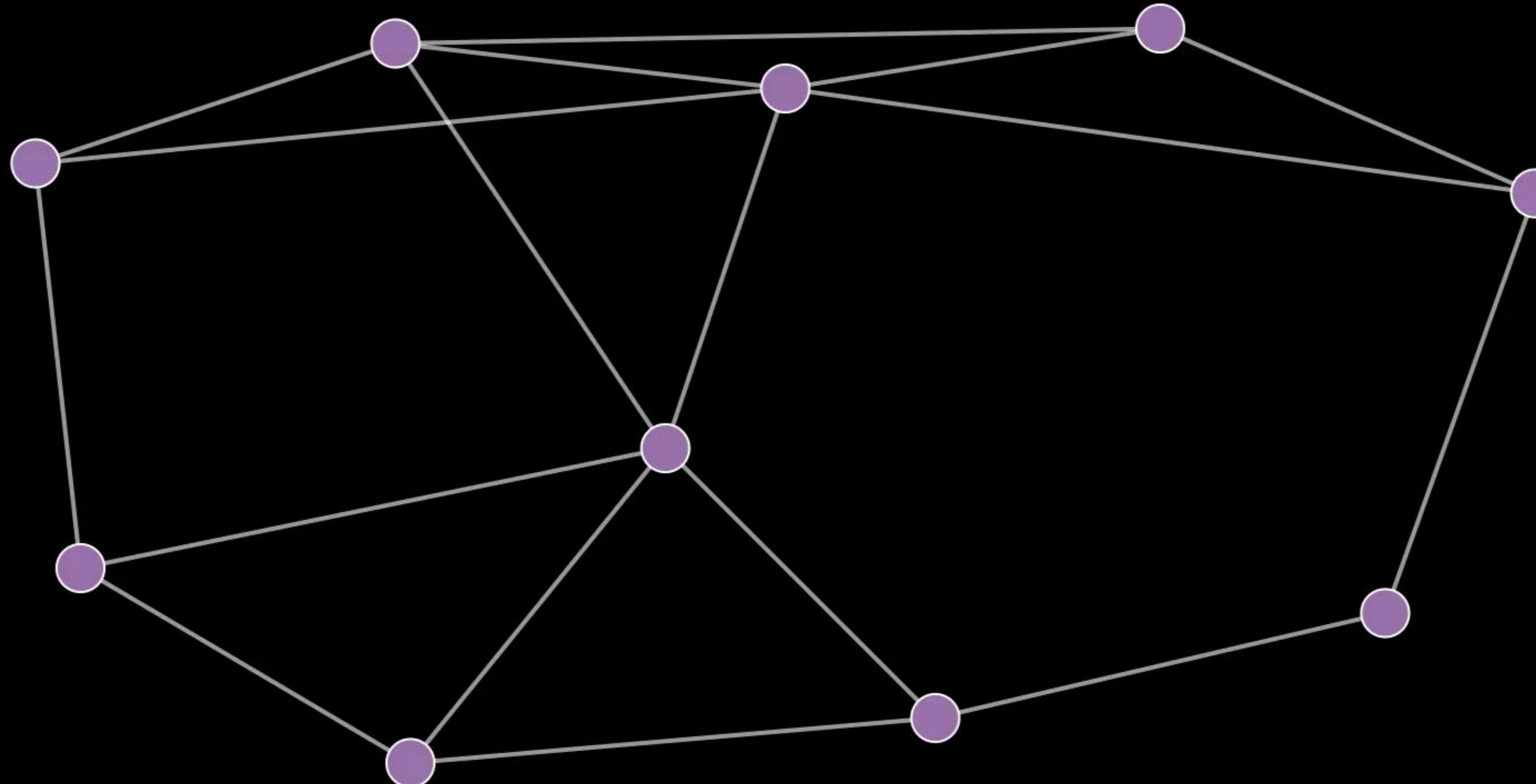
- Kruskal: ordenar por peso y evitar ciclos
- El MST conecta todos los nodos con peso total mínimo

Peso total MST: **30**

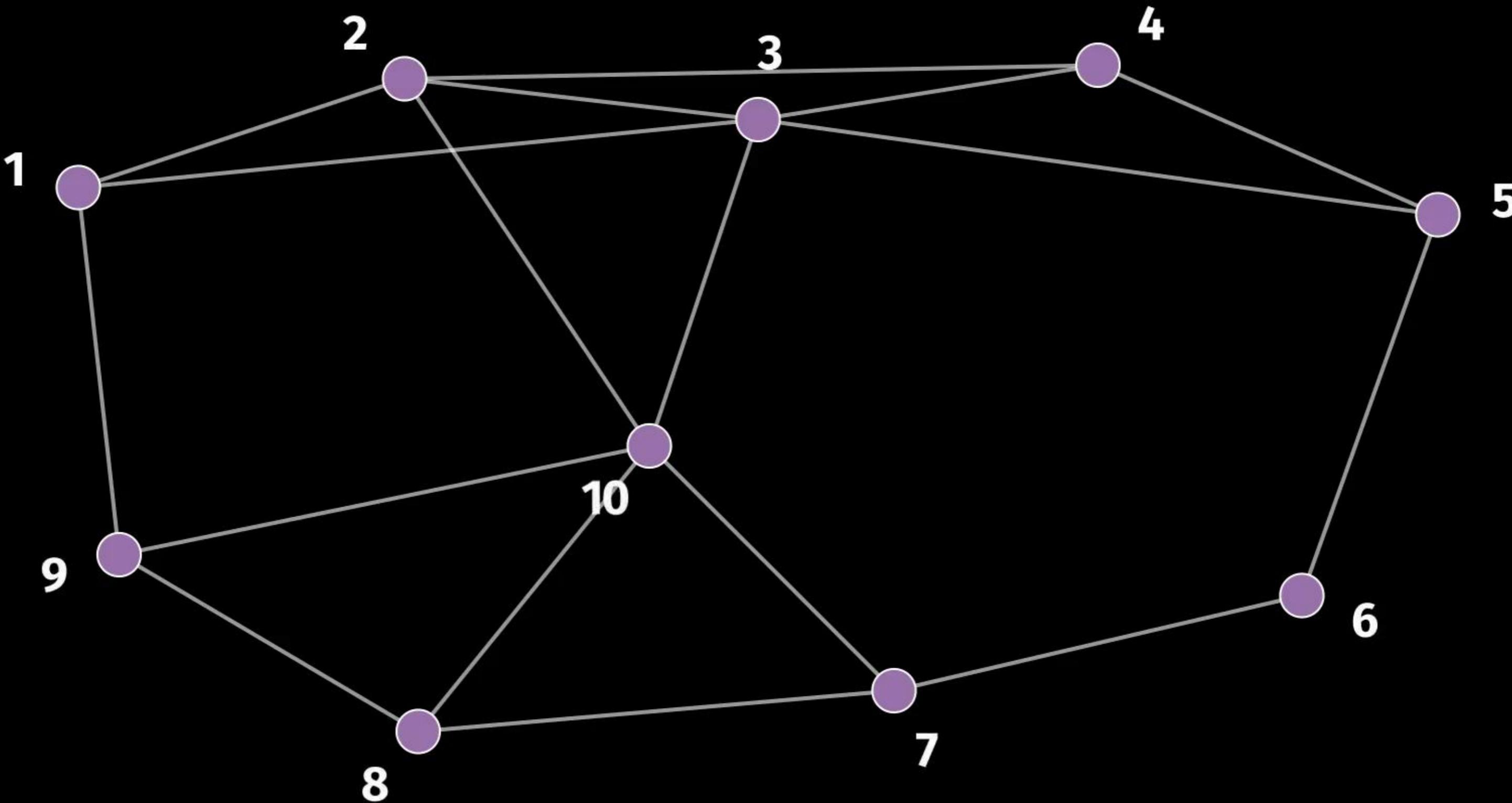
¡MST encontrado!

Minimum Spanning Tree (Prim)

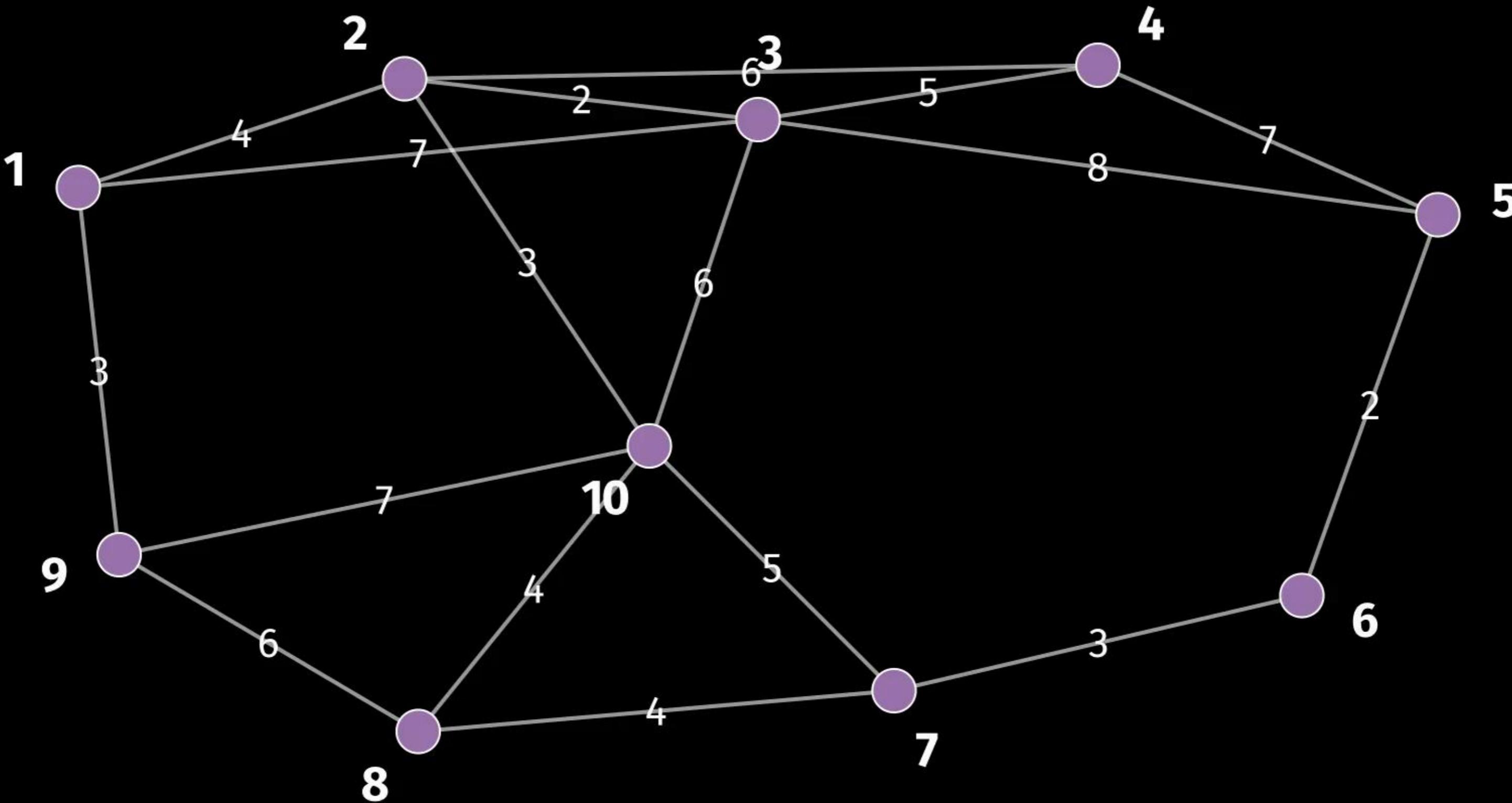
Minimum Spanning Tree (Prim)



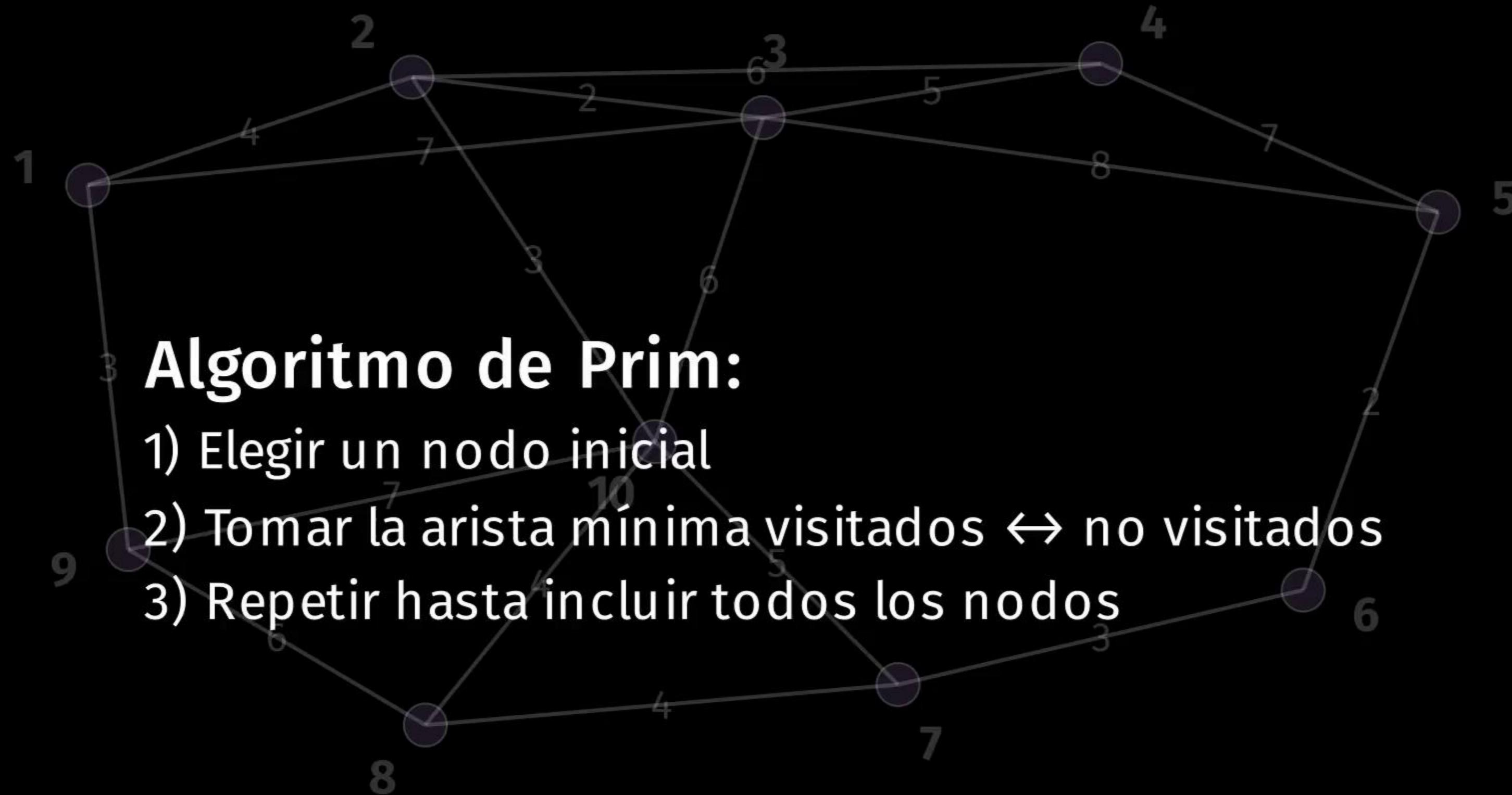
Minimum Spanning Tree (Prim)



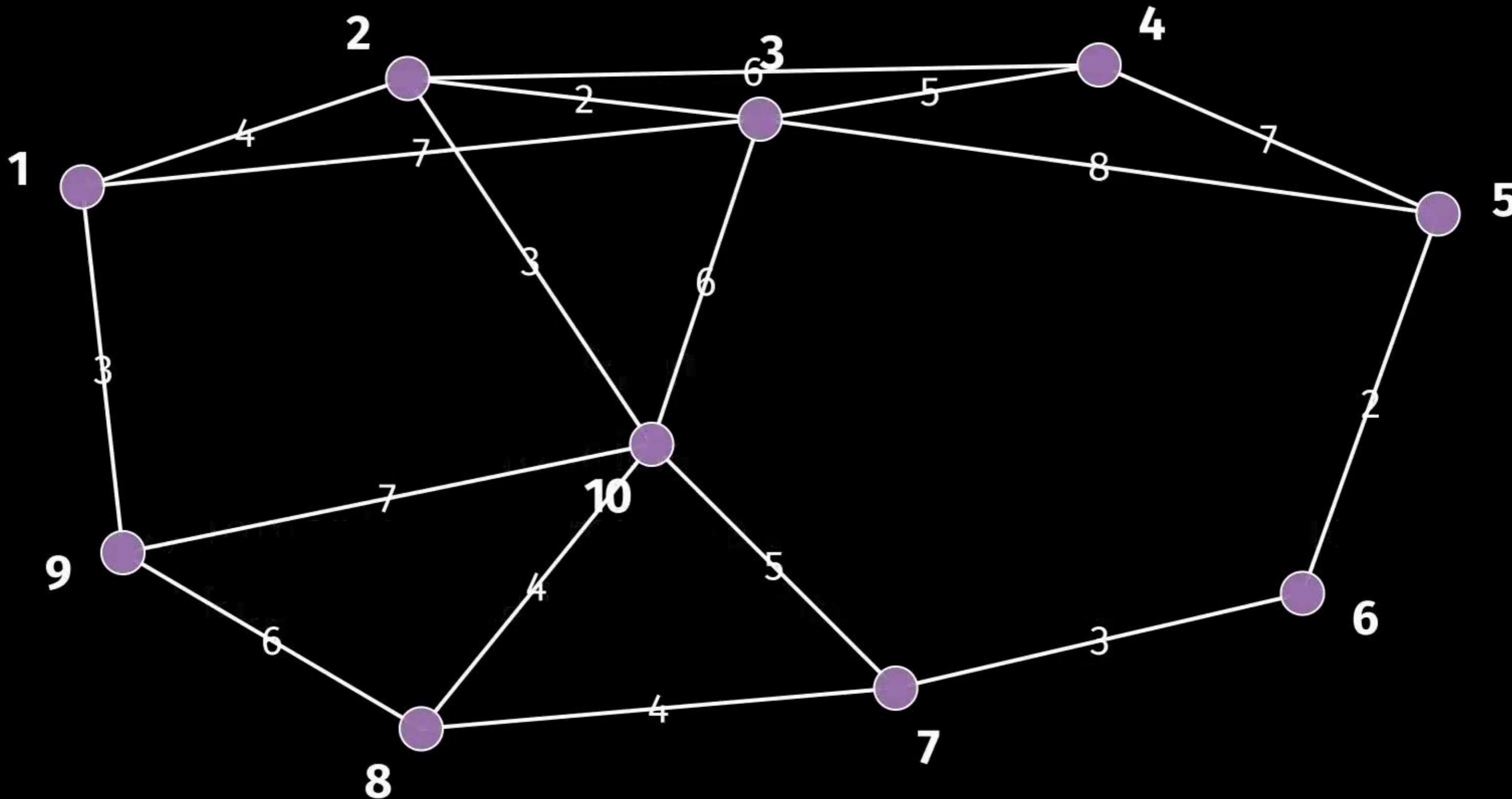
Minimum Spanning Tree (Prim)



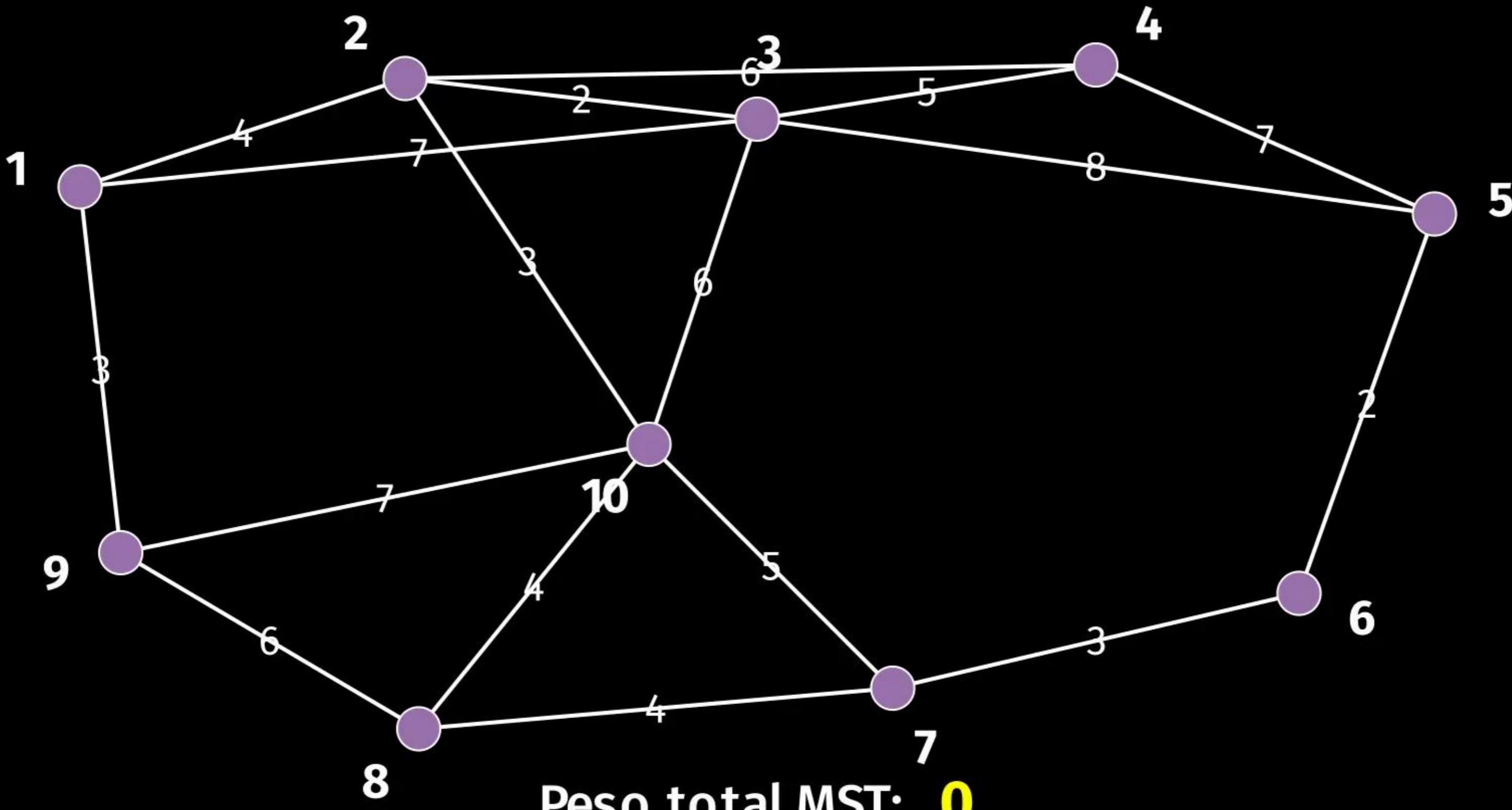
Minimum Spanning Tree (Prim)



Minimum Spanning Tree (Prim)

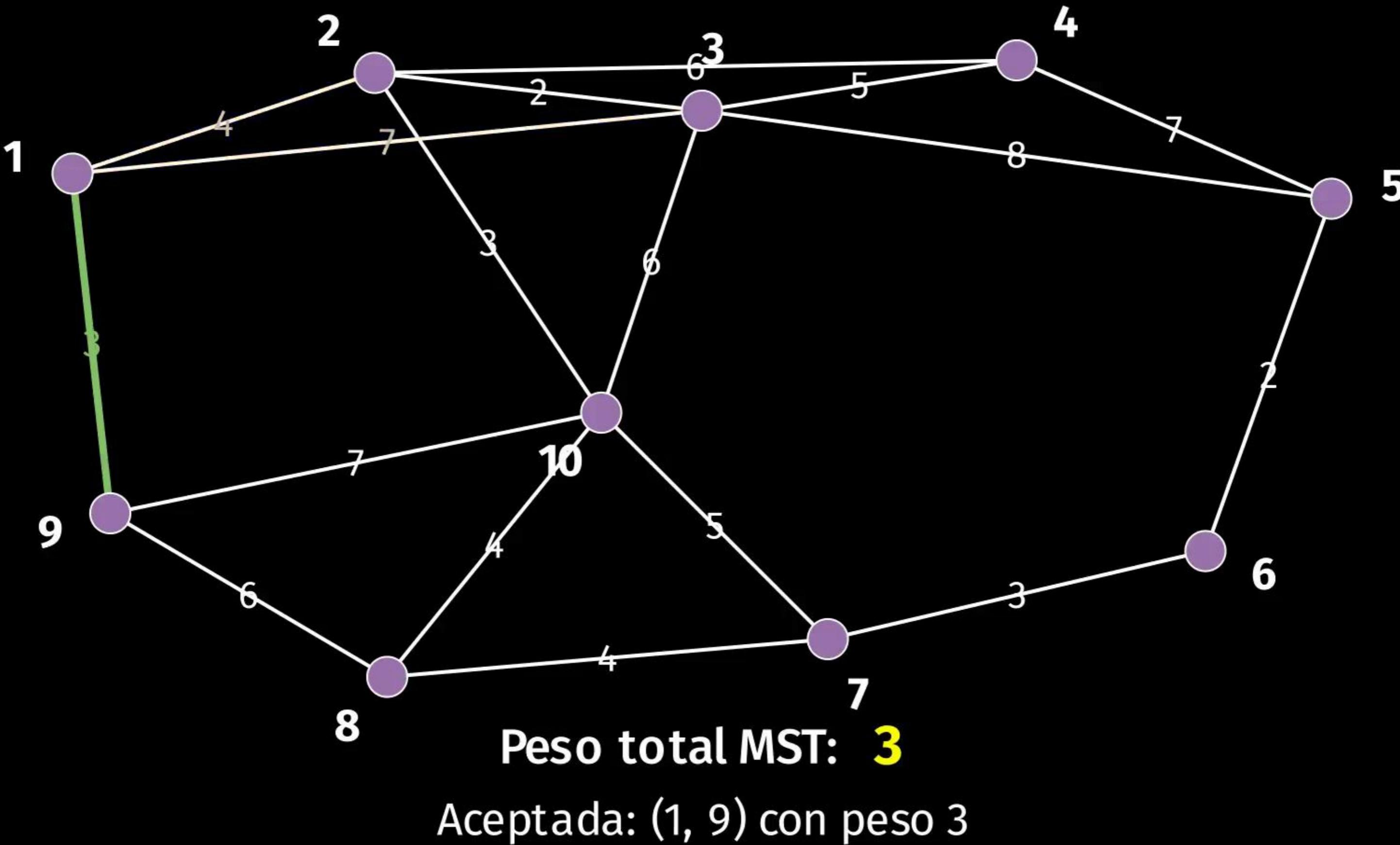


Minimum Spanning Tree (Prim)

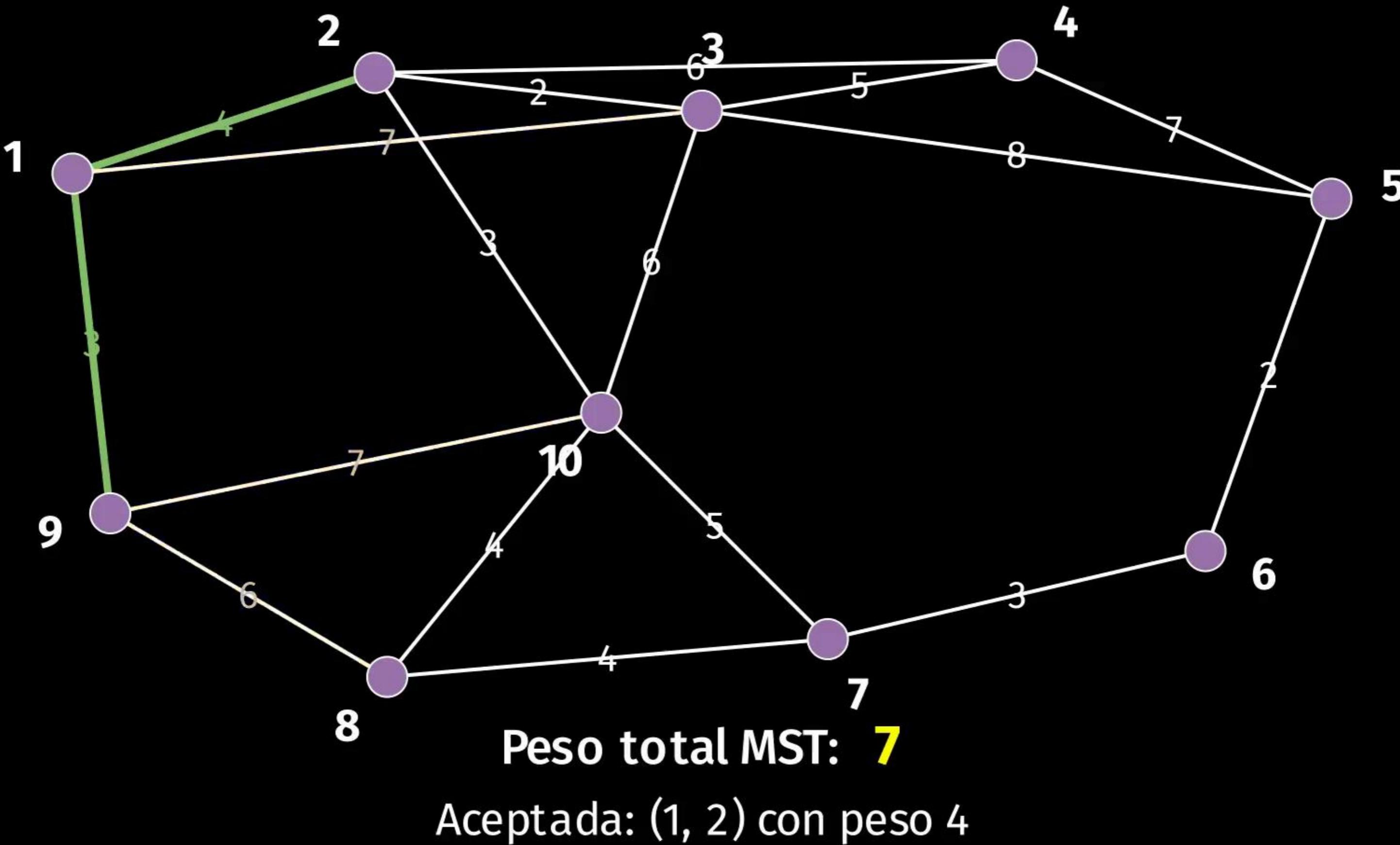


Elegimos un nodo inicial y expandimos por la arista más barata.

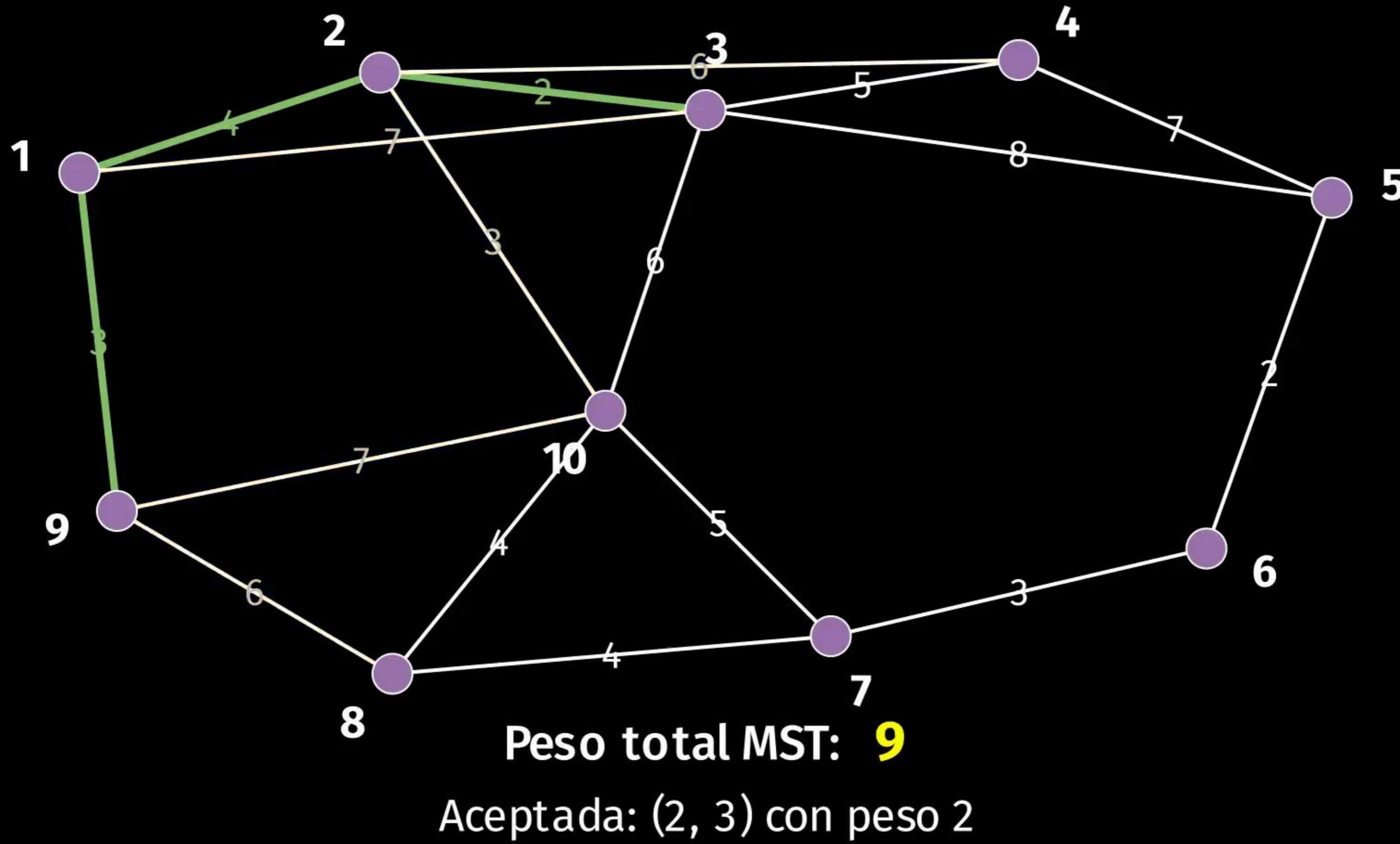
Minimum Spanning Tree (Prim)



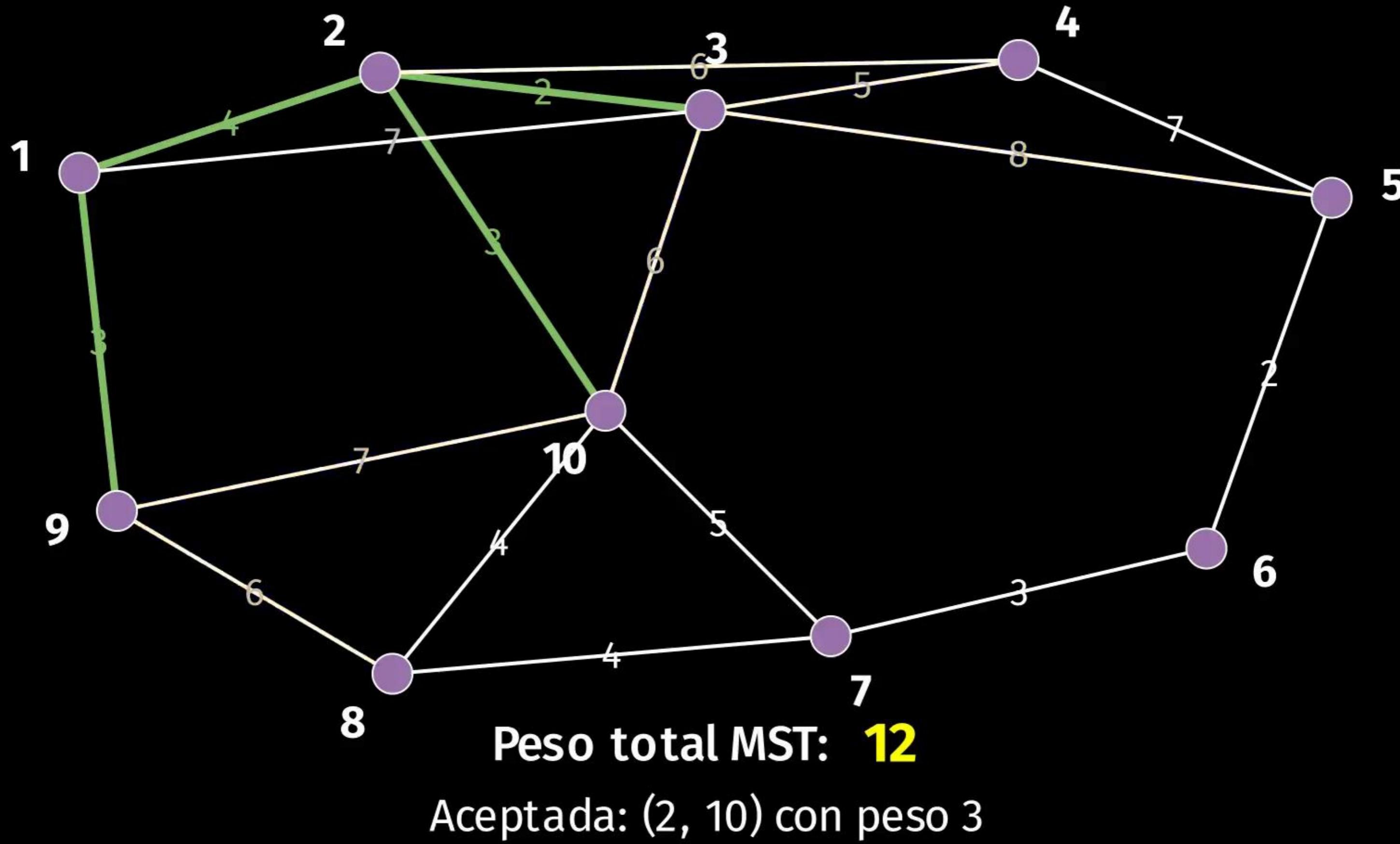
Minimum Spanning Tree (Prim)



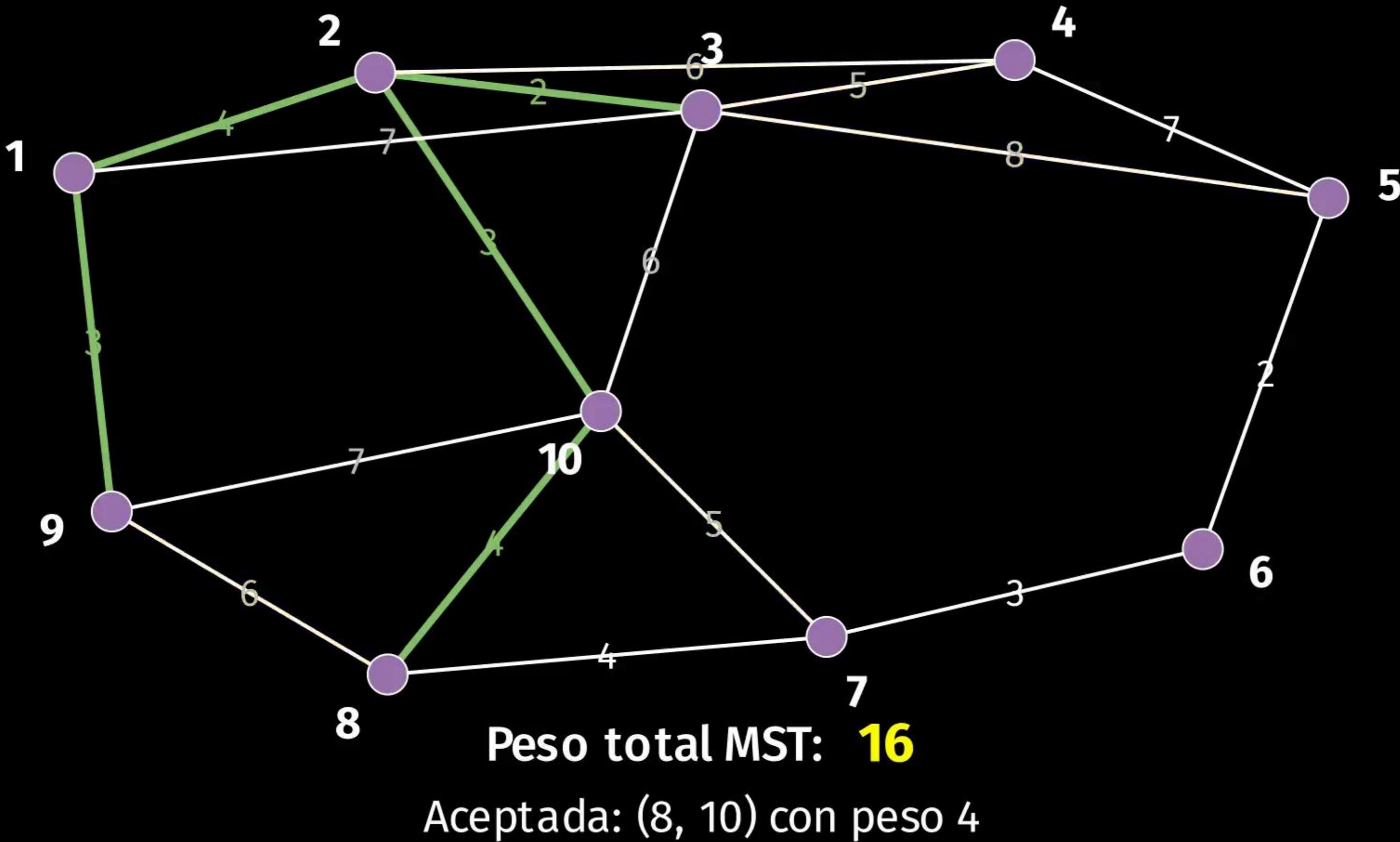
Minimum Spanning Tree (Prim)



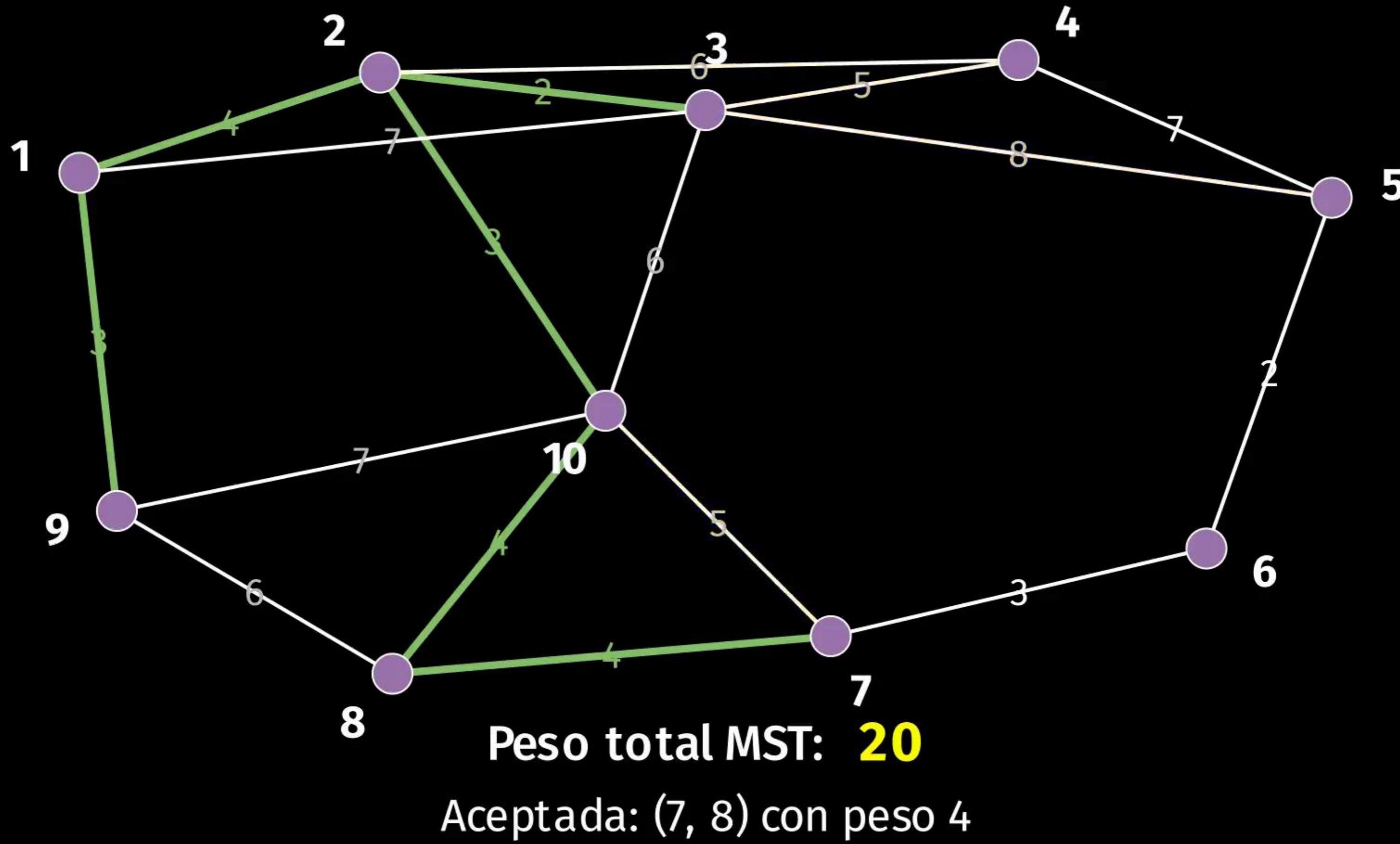
Minimum Spanning Tree (Prim)



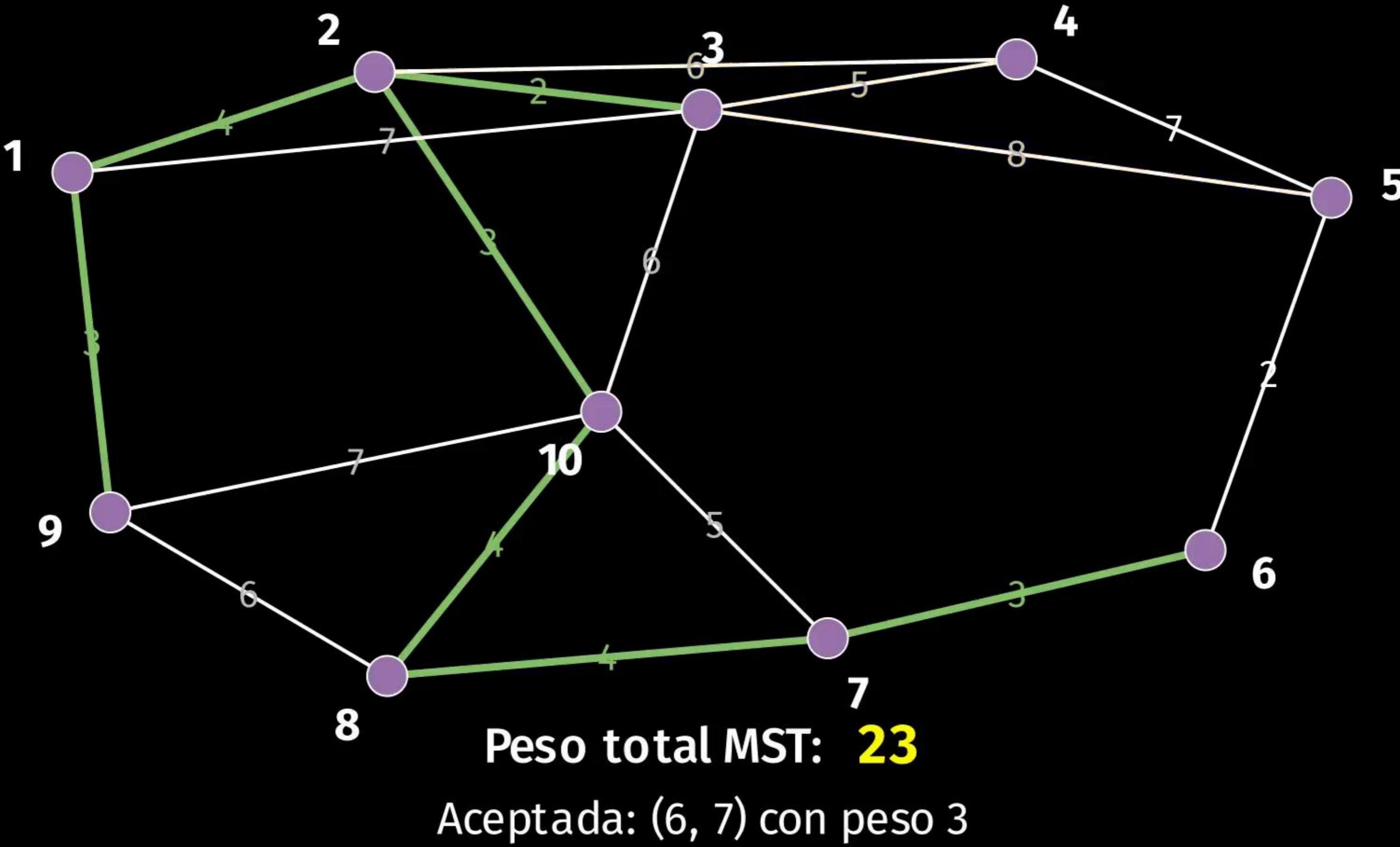
Minimum Spanning Tree (Prim)



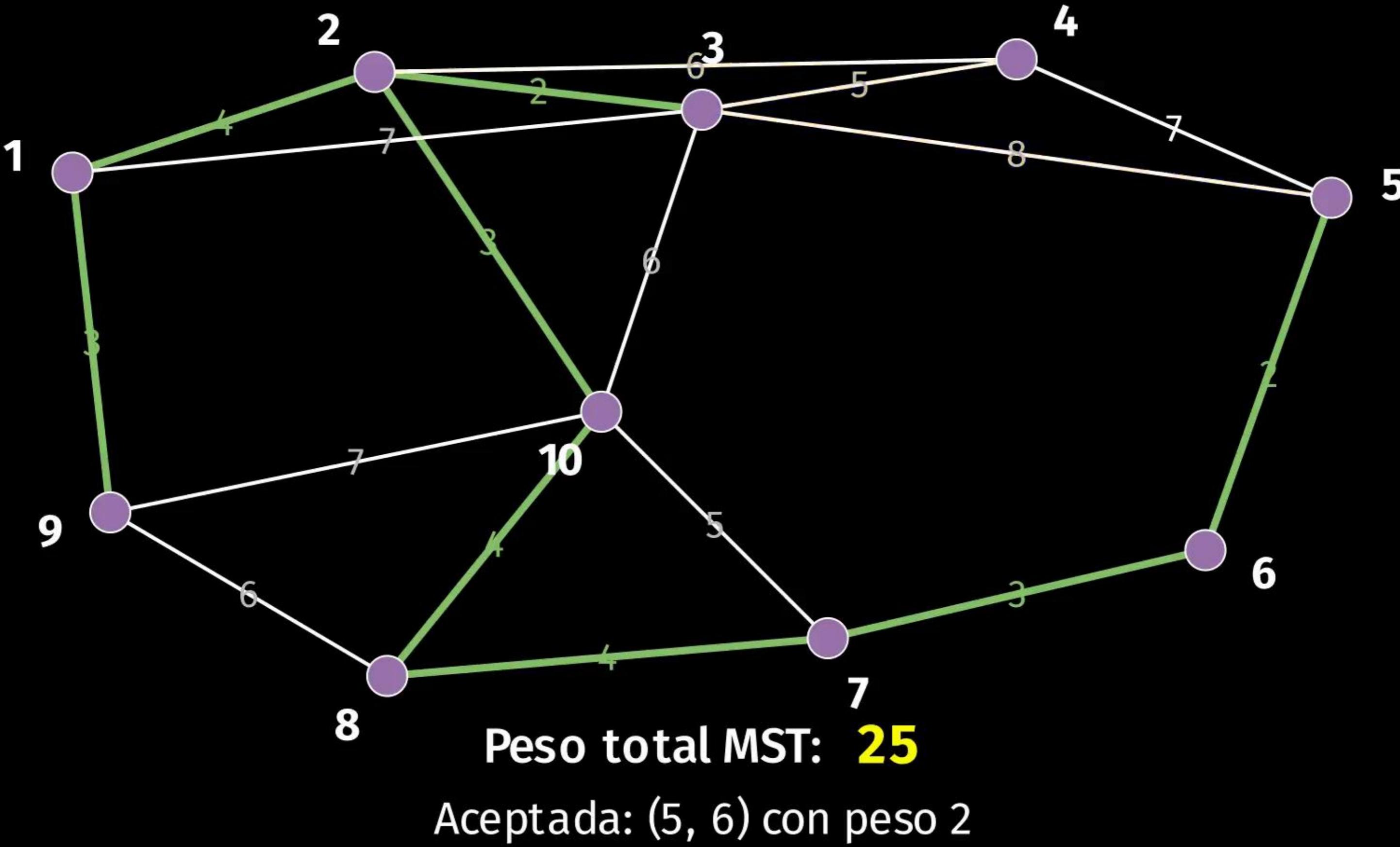
Minimum Spanning Tree (Prim)



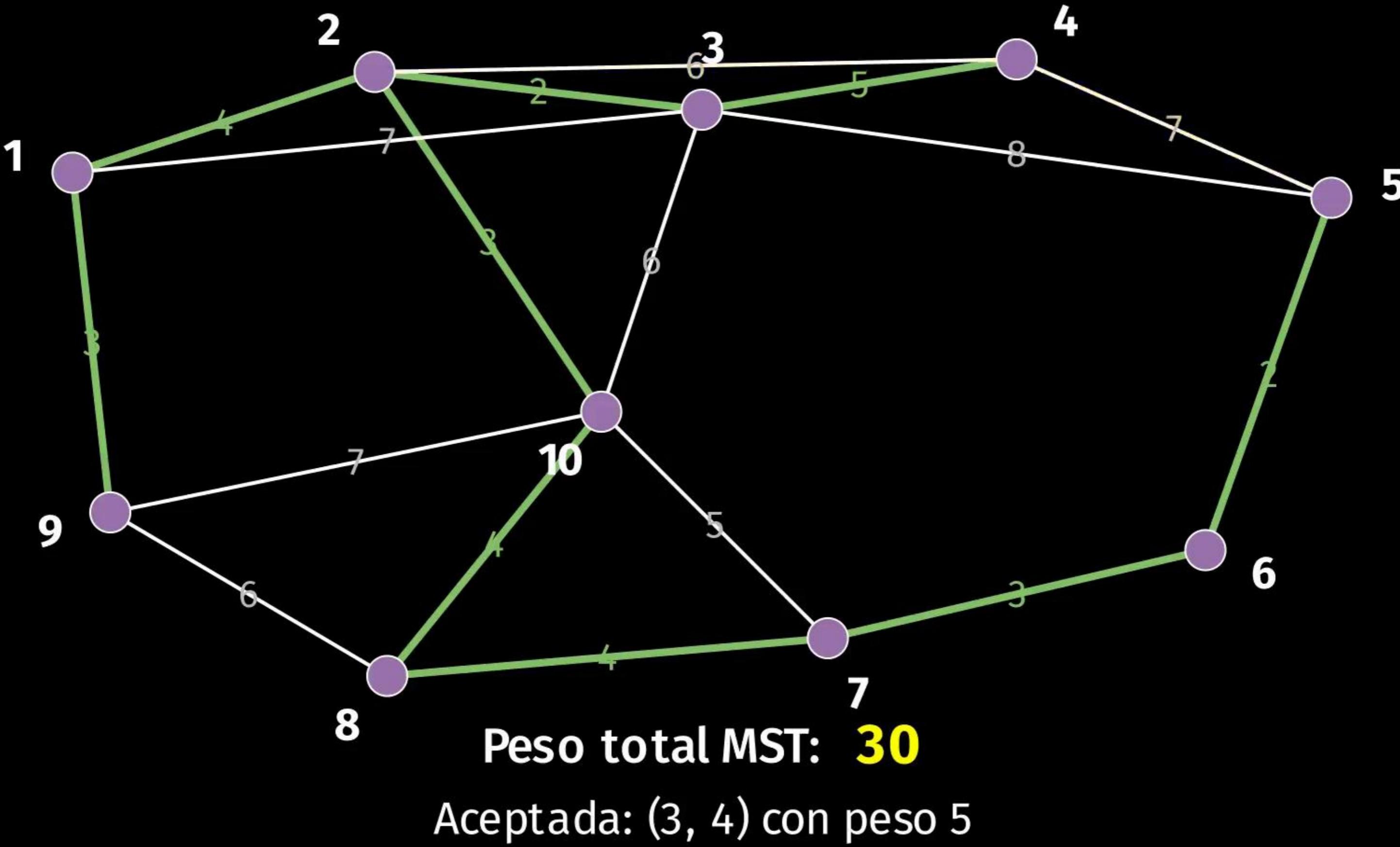
Minimum Spanning Tree (Prim)



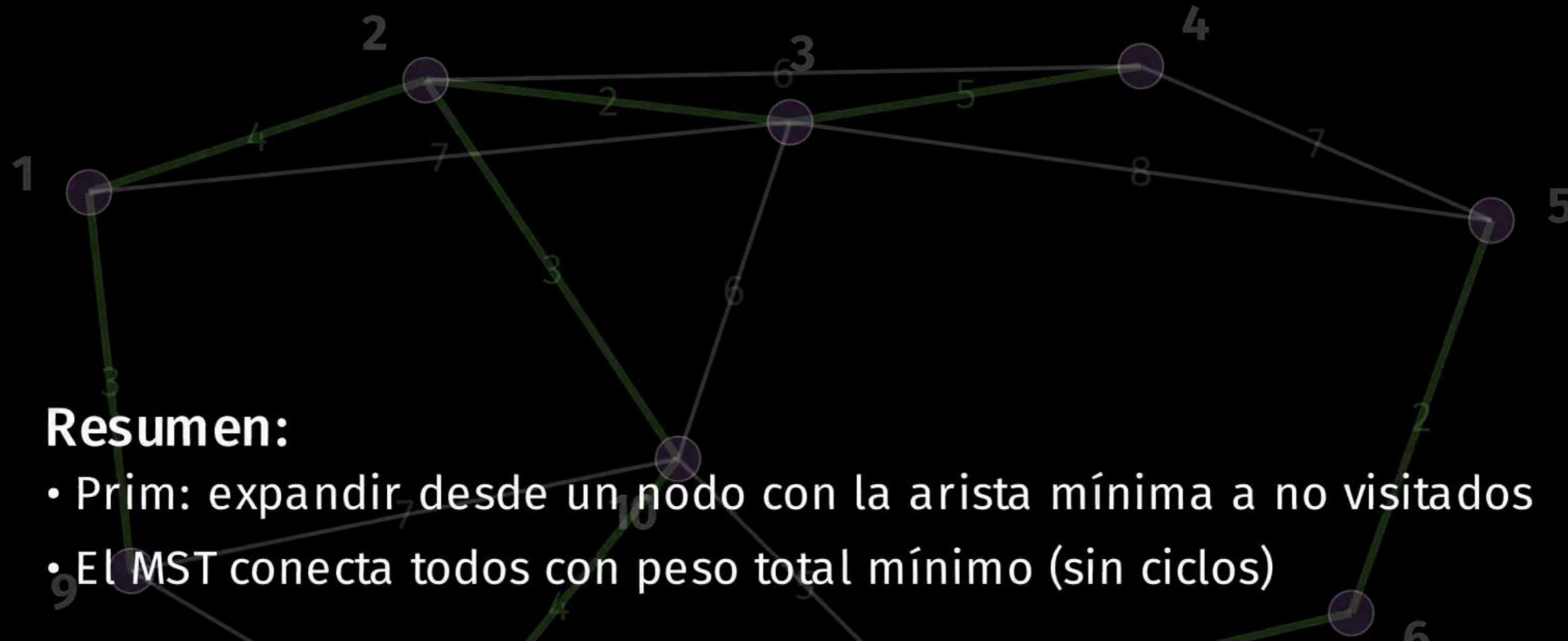
Minimum Spanning Tree (Prim)



Minimum Spanning Tree (Prim)



Minimum Spanning Tree (Prim)



Resumen:

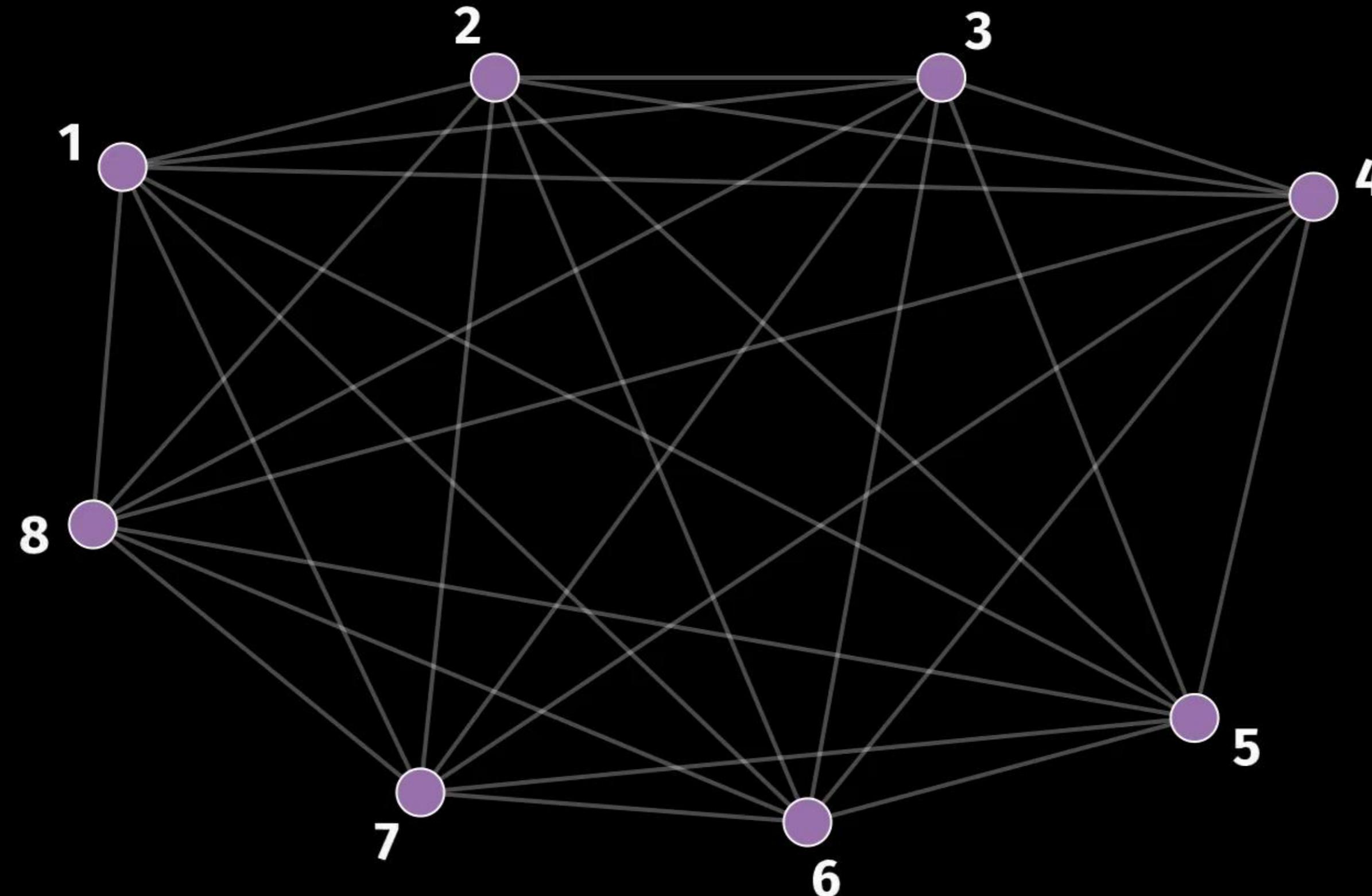
- Prim: expandir desde un nodo con la arista mínima a no visitados
- El MST conecta todos con peso total mínimo (sin ciclos)

Peso total MST: **30**

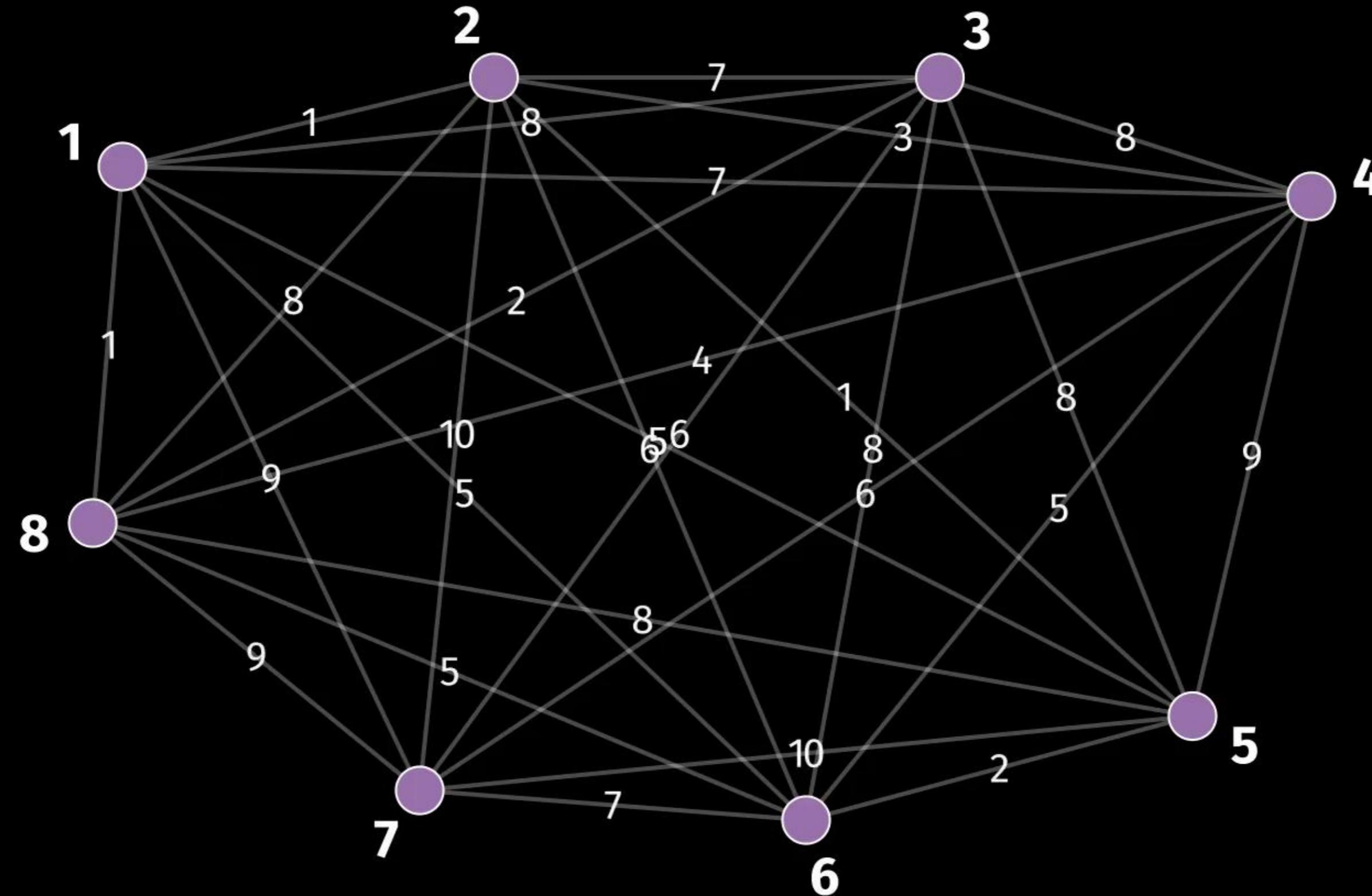
¡MST encontrado!

TSP Greedy

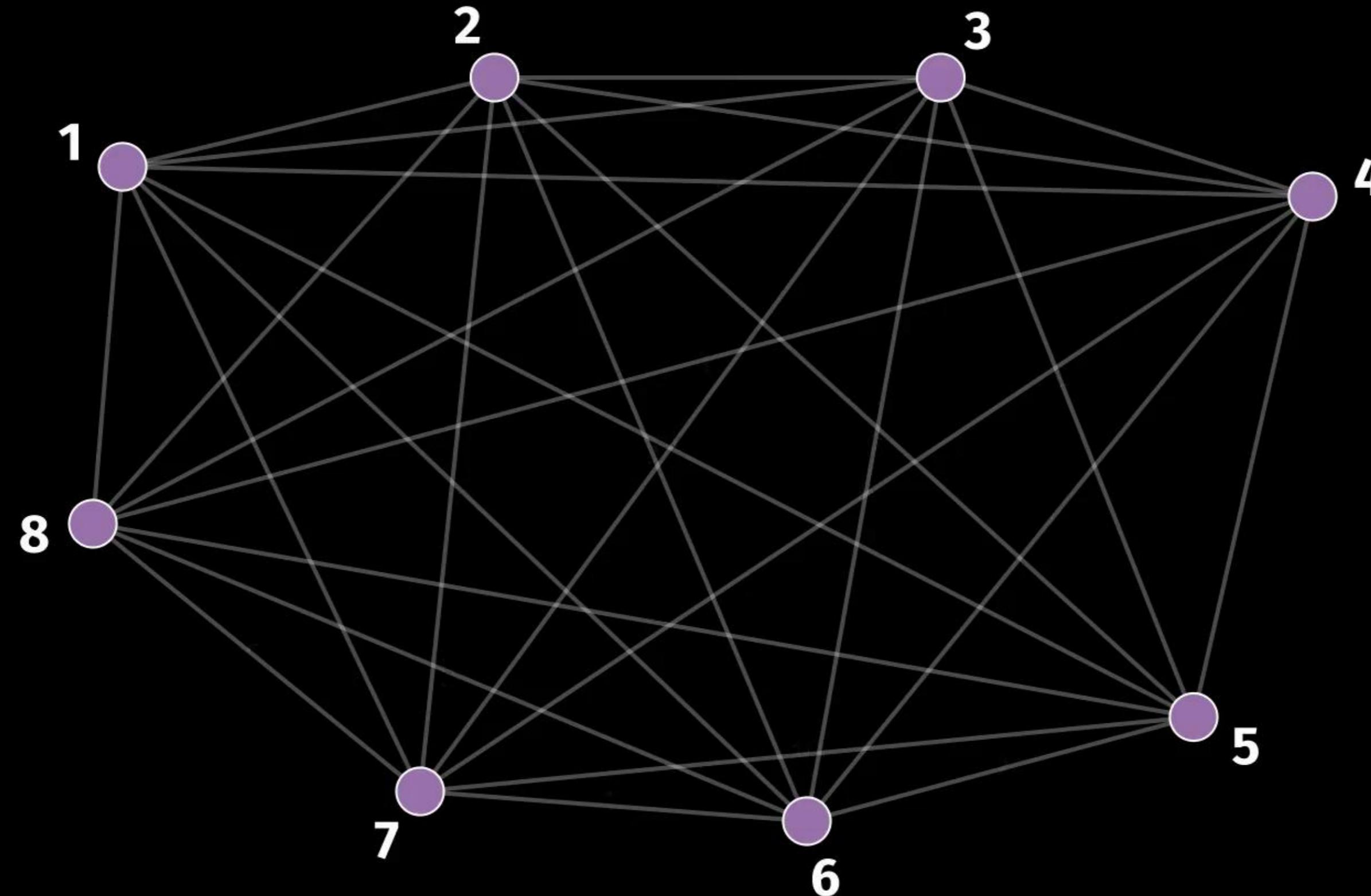
TSP Greedy



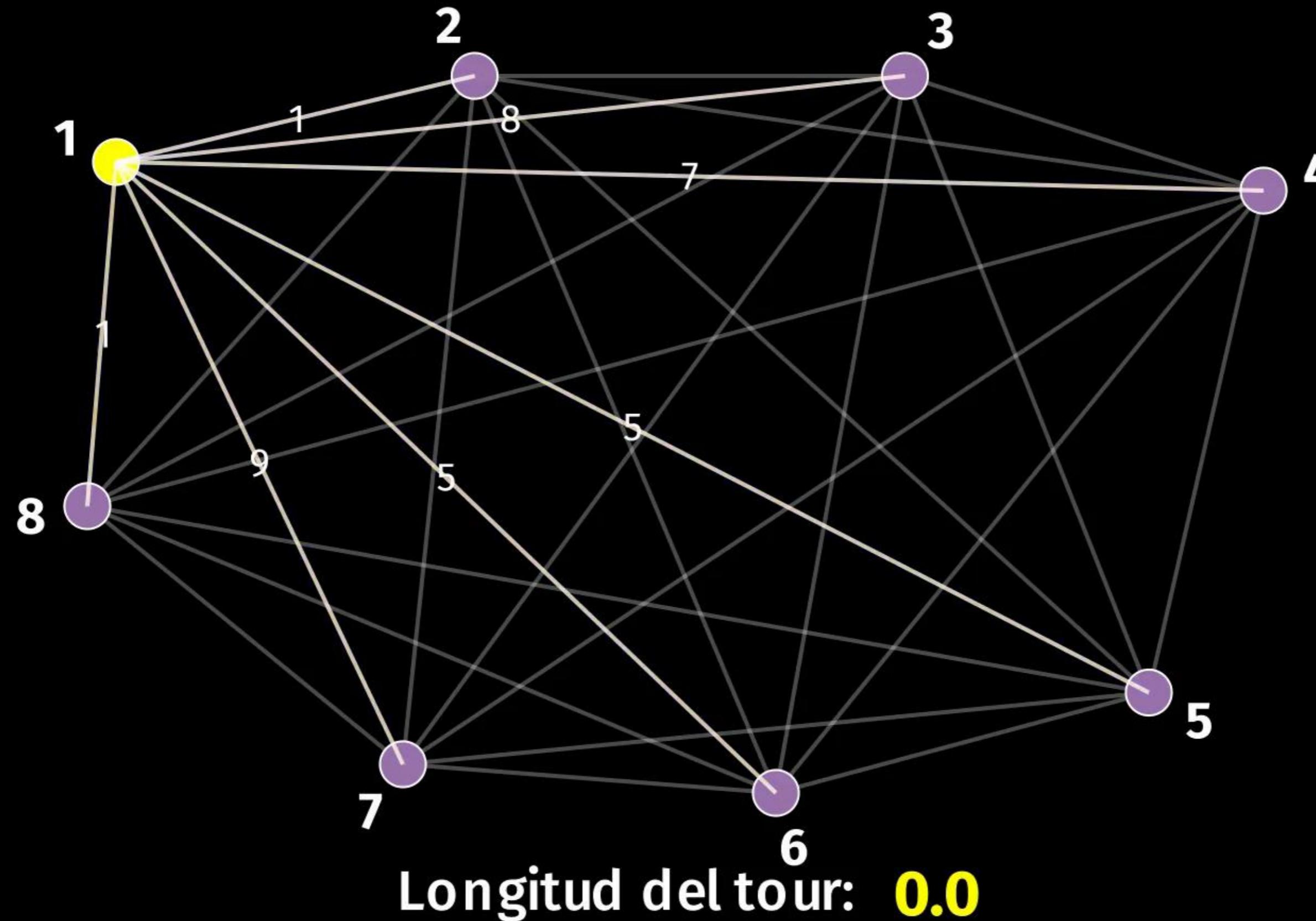
TSP Greedy



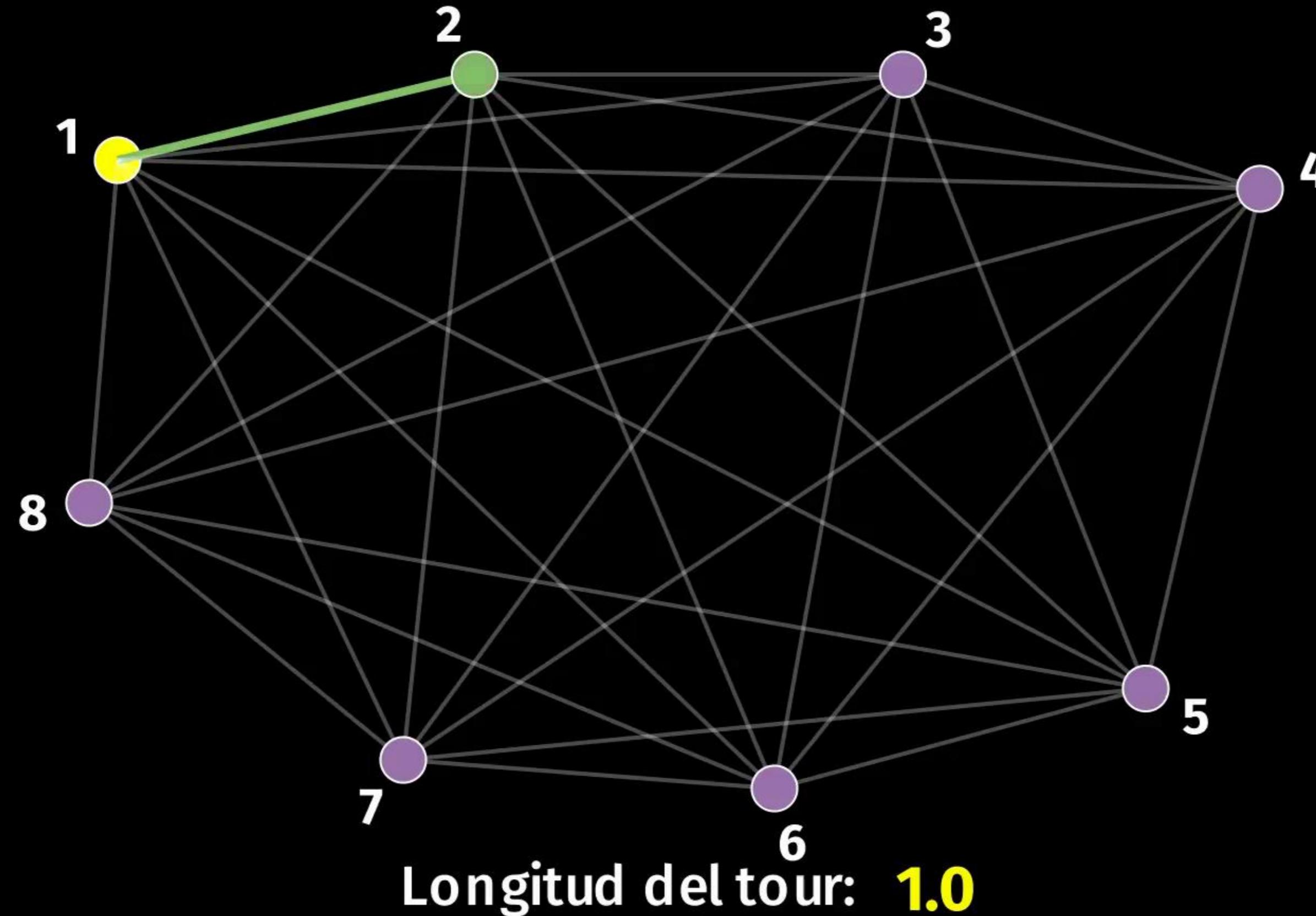
TSP Greedy



TSP Greedy

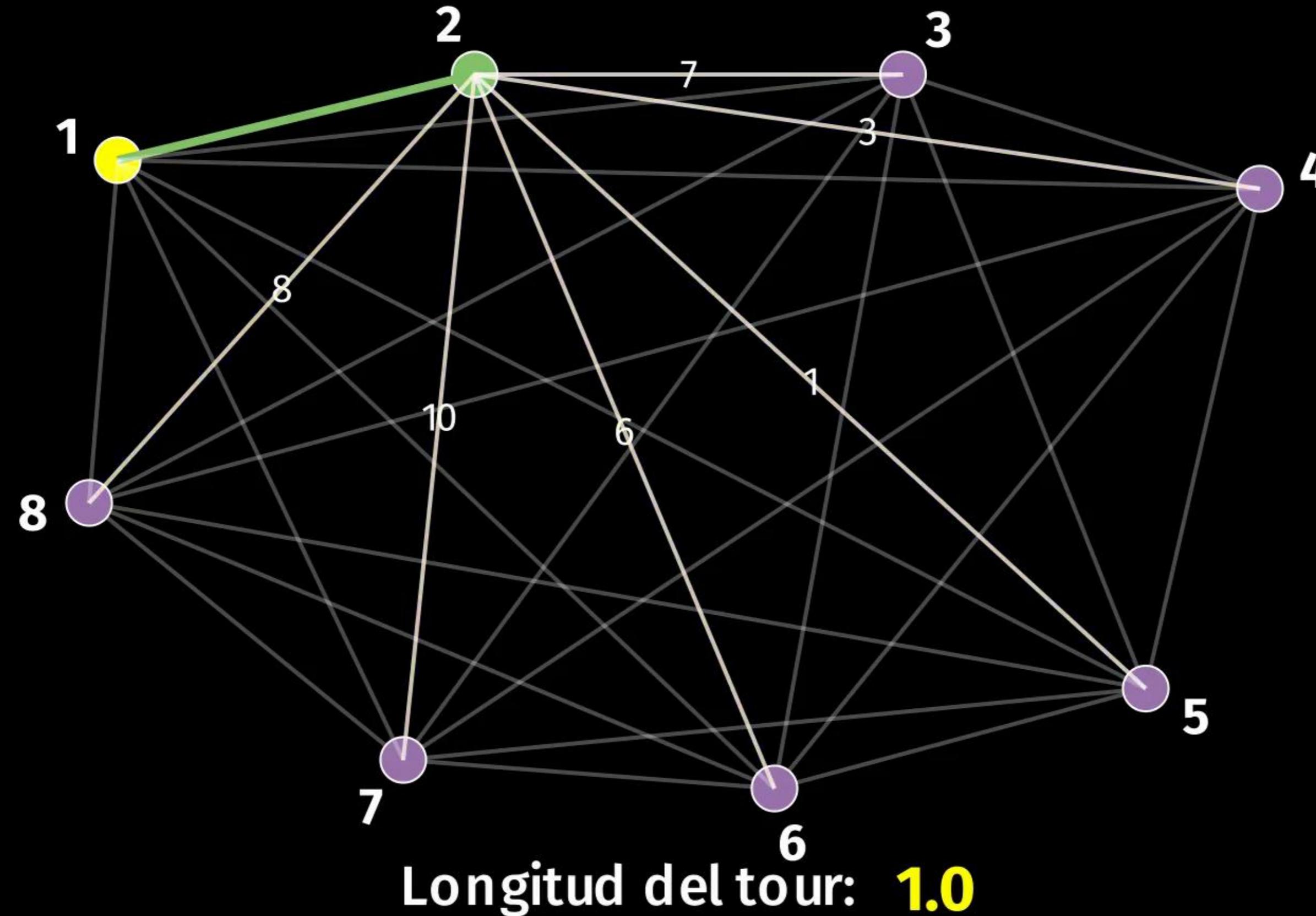


TSP Greedy



Desde 1: el más cercano es 2 ($w=1$)

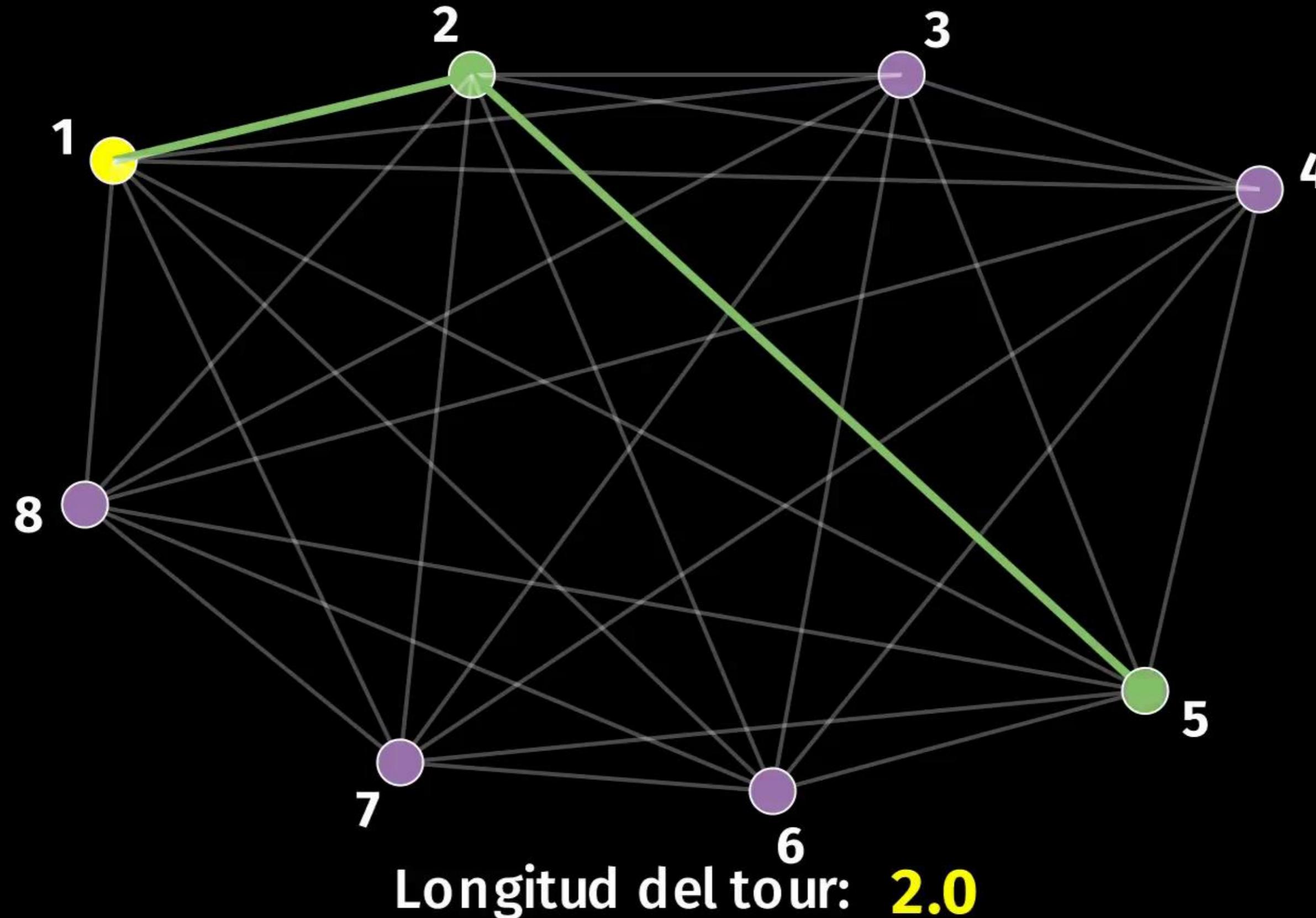
TSP Greedy



Longitud del tour: **1.0**

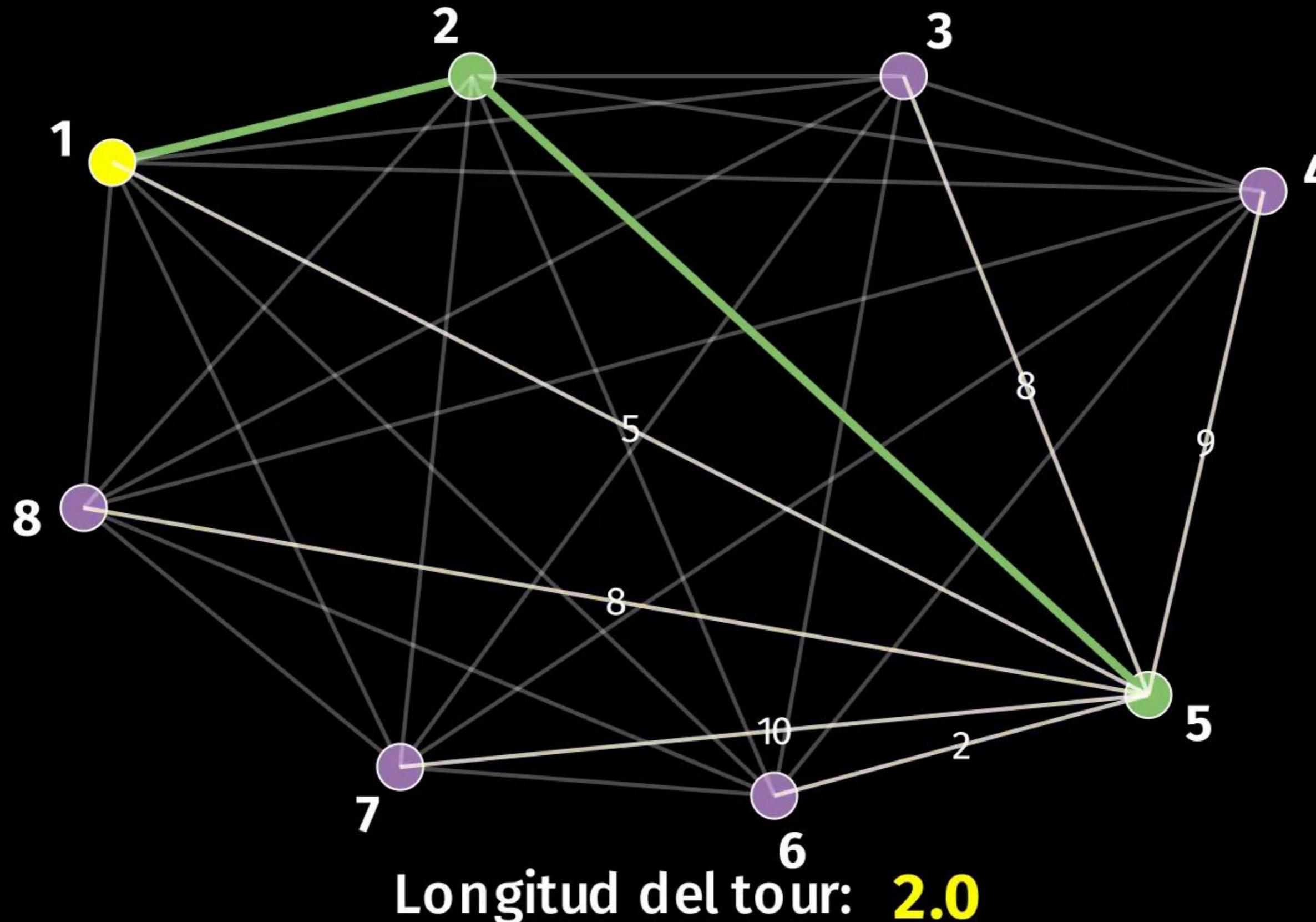
Desde 1: el más cercano es 2 ($w=1$)

TSP Greedy



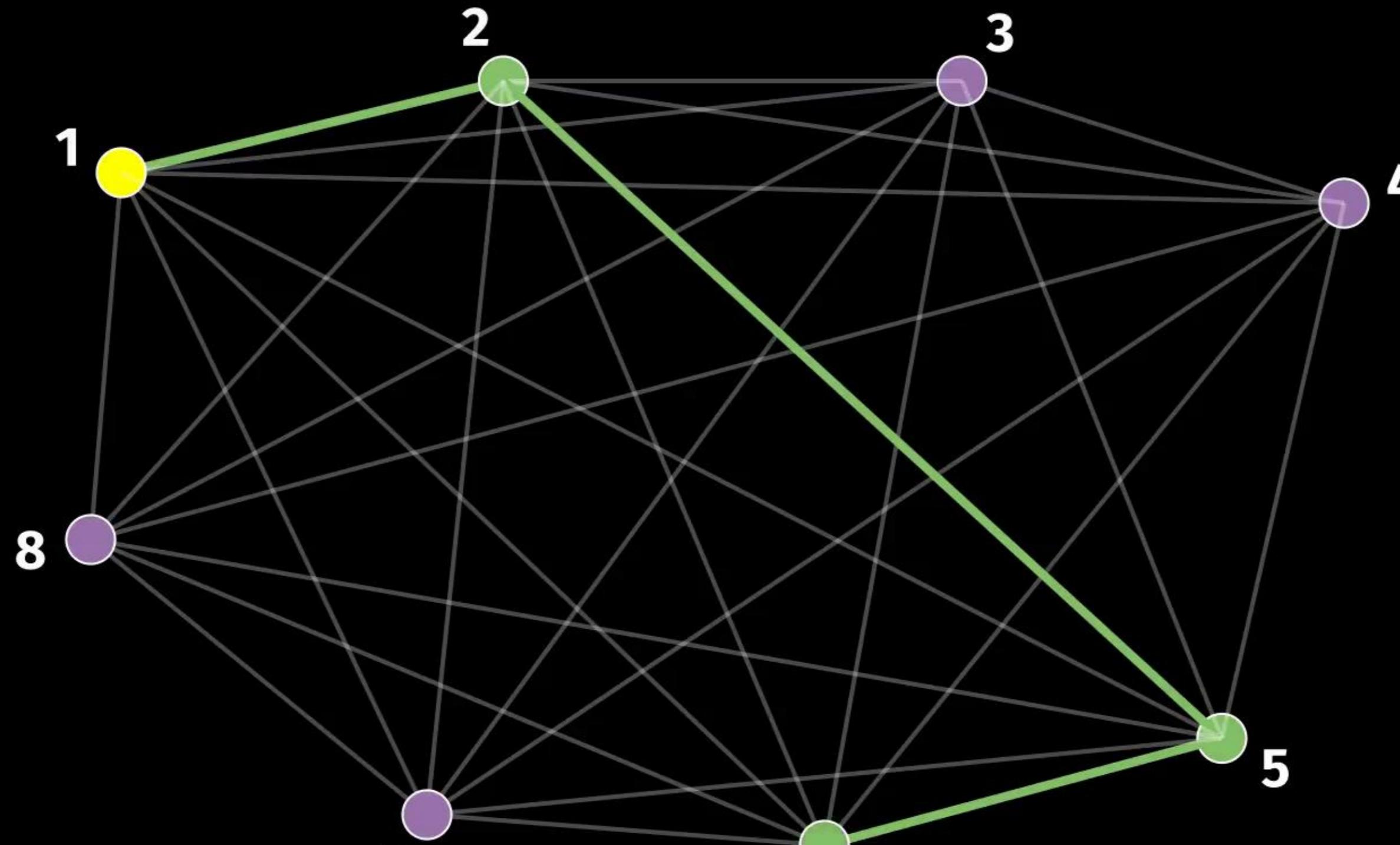
Desde 2: el más cercano es 5 ($w=1$)

TSP Greedy



Desde 2: el más cercano es 5 ($w=1$)

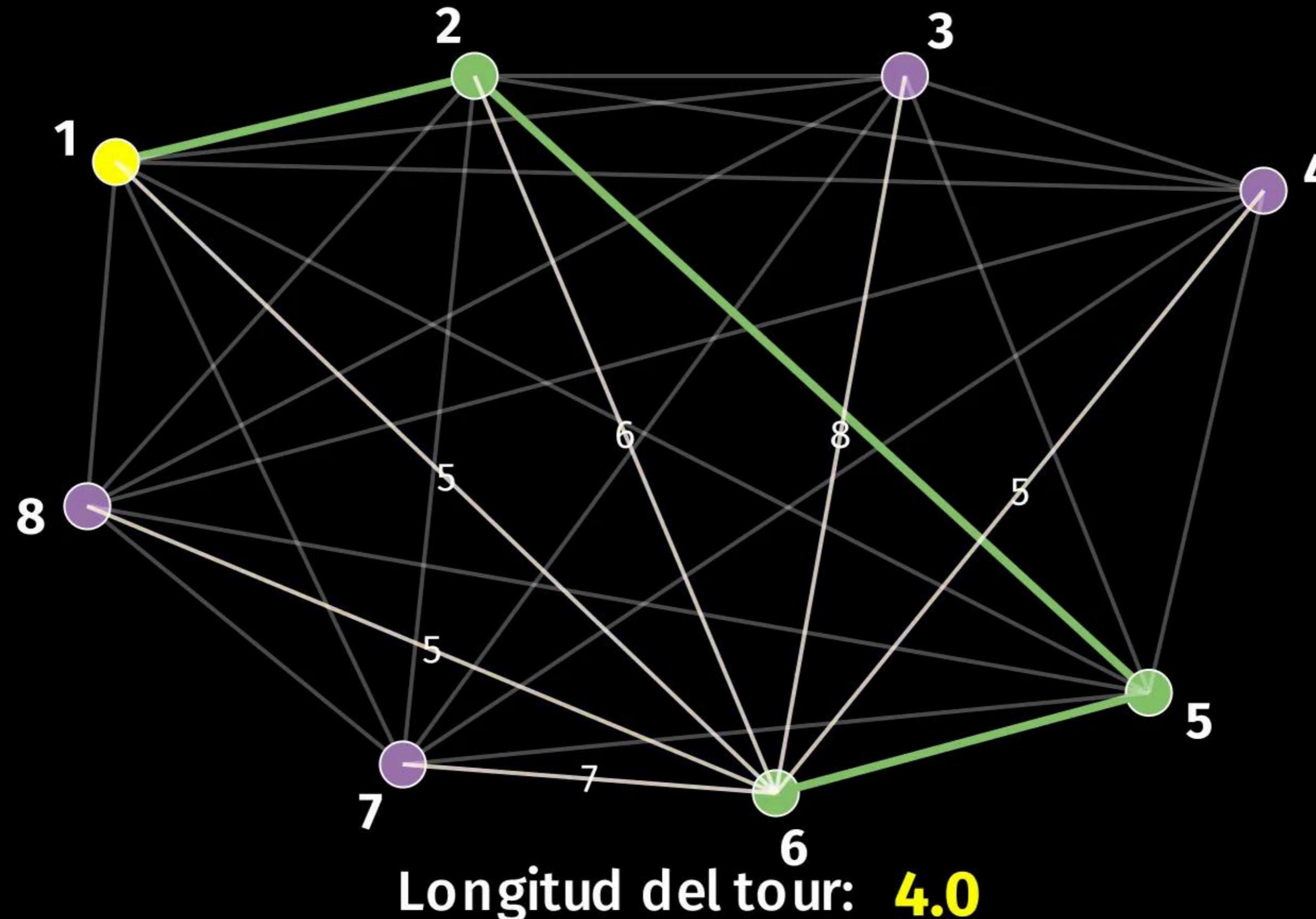
TSP Greedy



Longitud del tour: **4.0**

Desde 5: el más cercano es 6 ($w=2$)

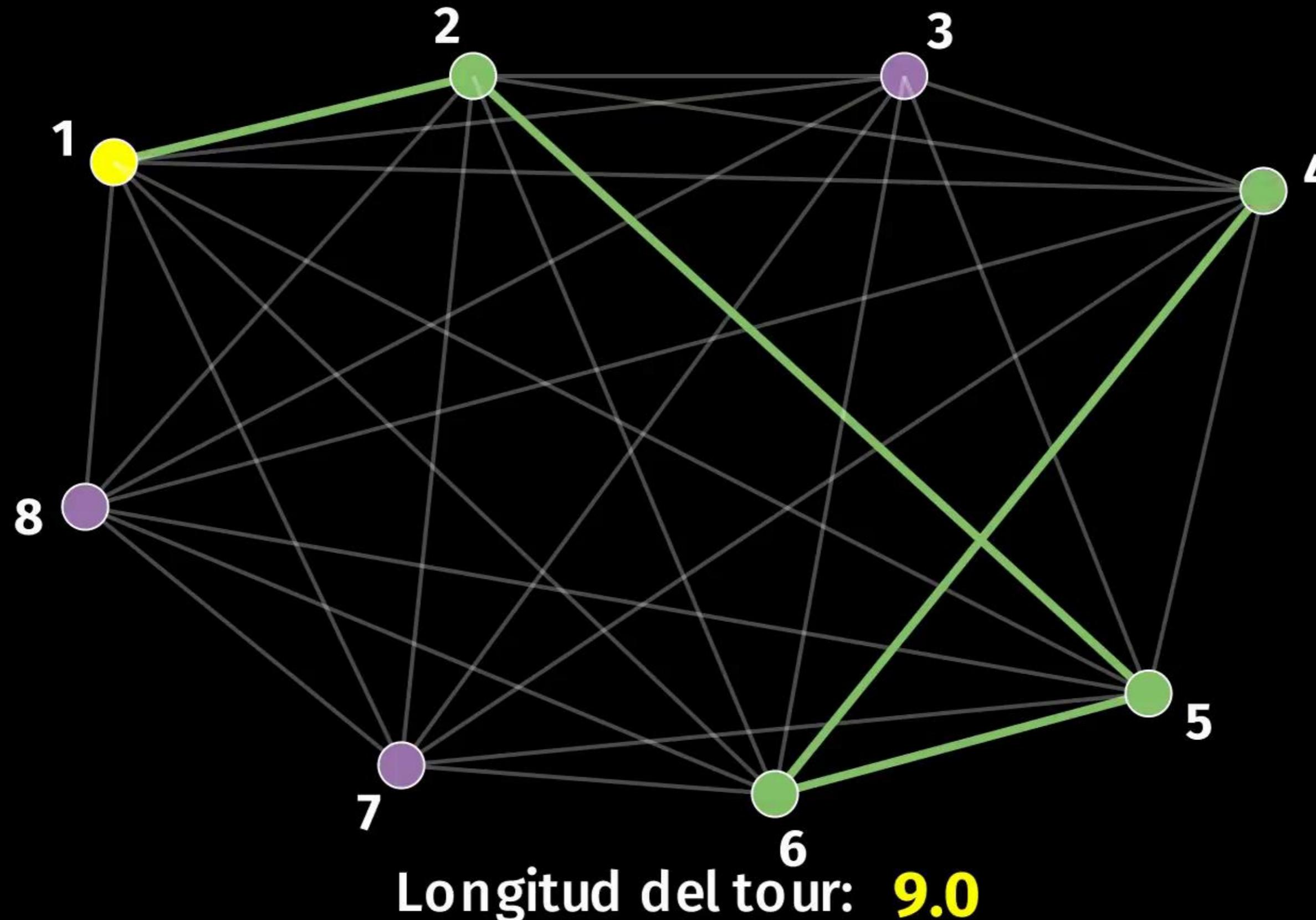
TSP Greedy



Longitud del tour: **4.0**

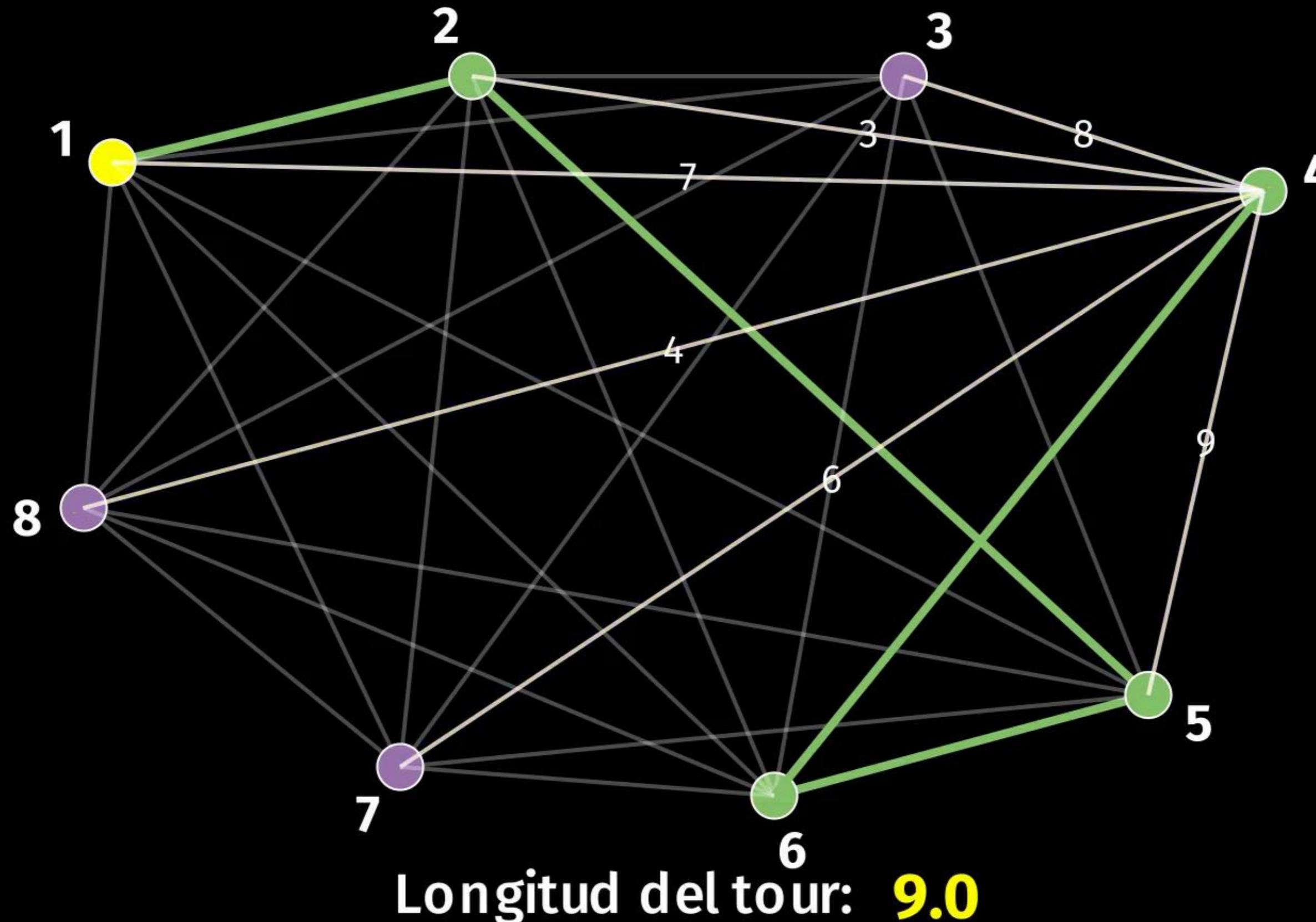
Desde 5: el más cercano es 6 ($w=2$)

TSP Greedy



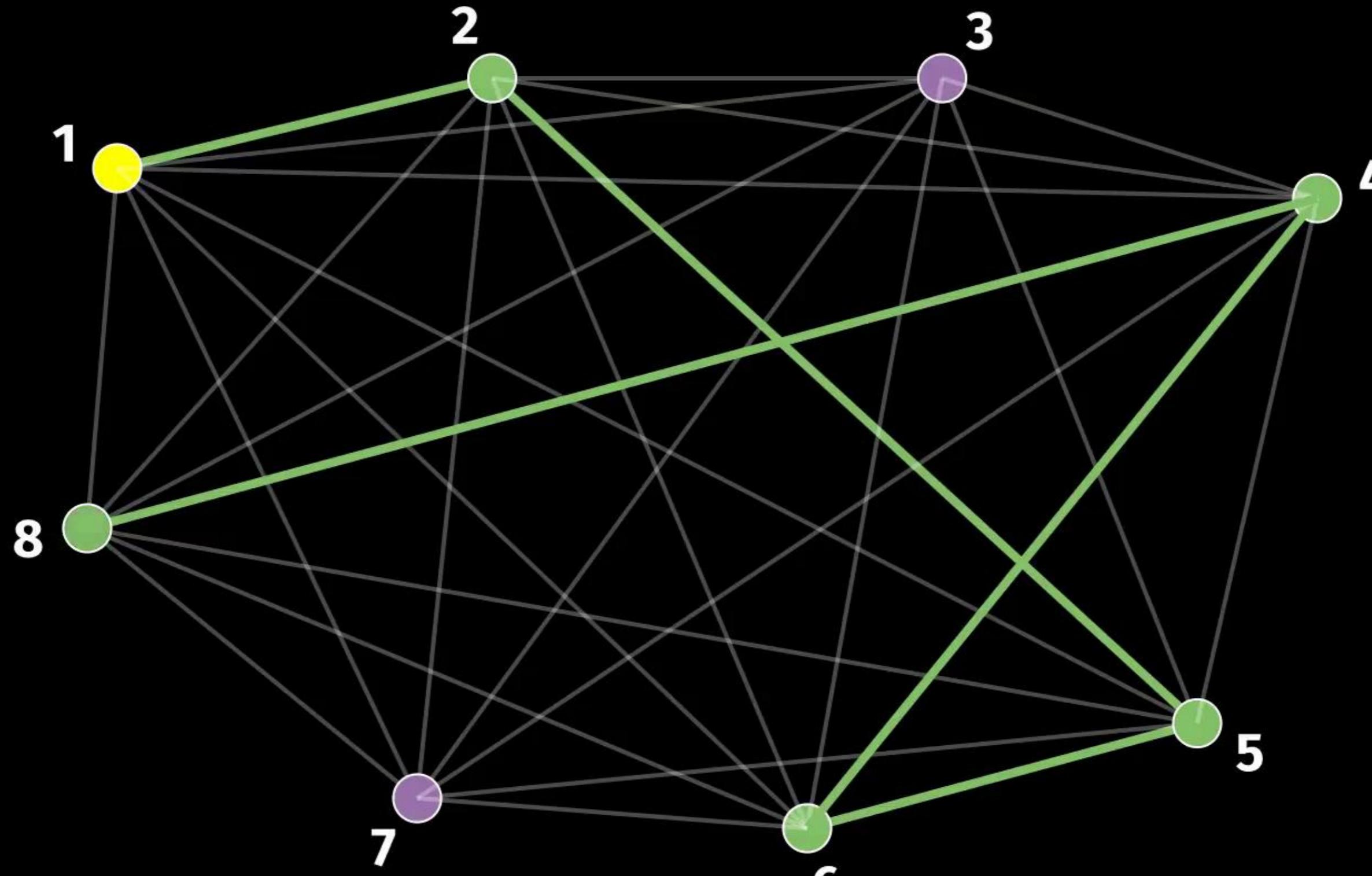
Desde 6: el más cercano es 4 ($w=5$)

TSP Greedy



Desde 6: el más cercano es 4 ($w=5$)

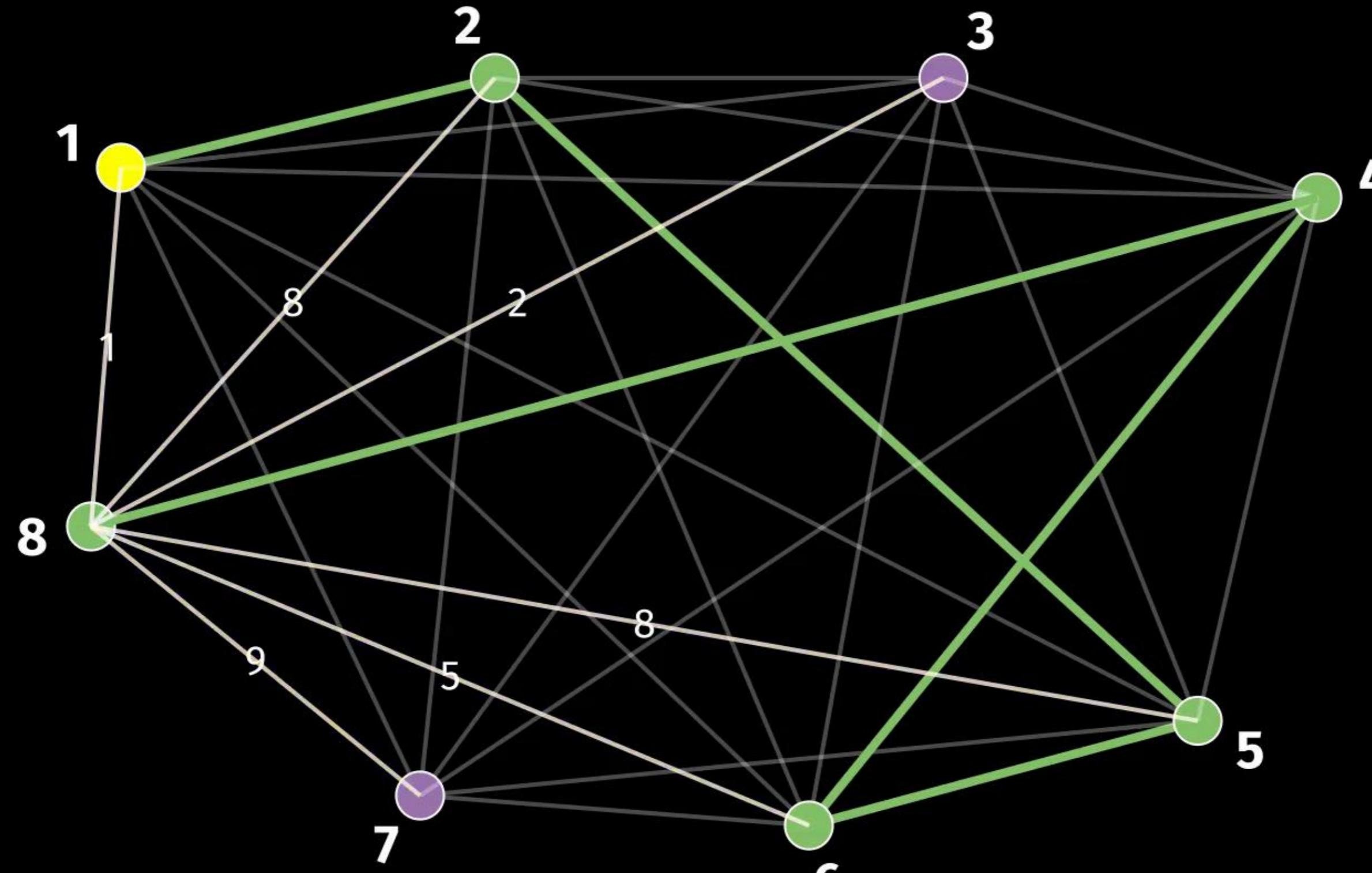
TSP Greedy



Longitud del tour: **13.0**

Desde 4: el más cercano es 8 ($w=4$)

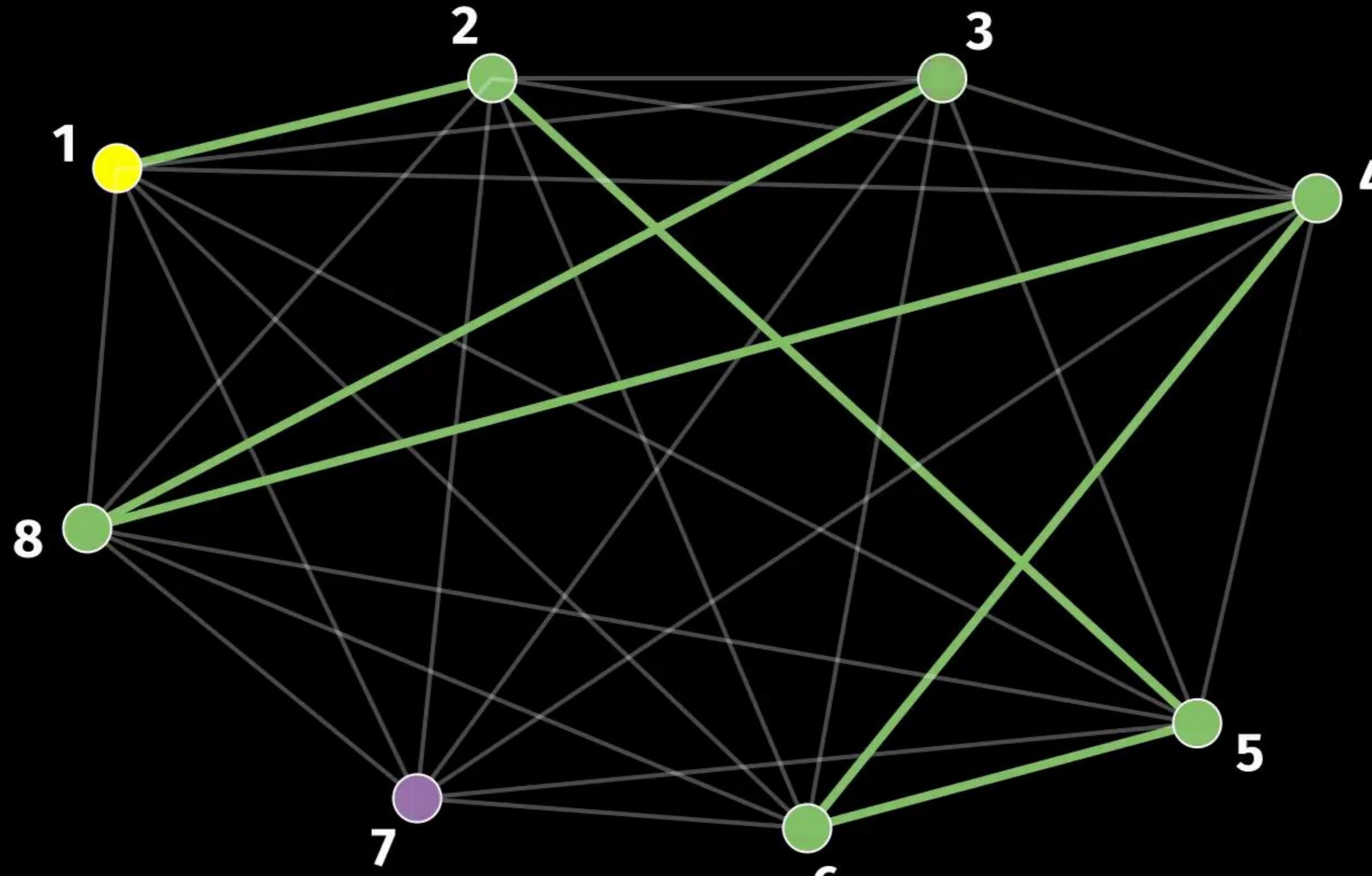
TSP Greedy



Longitud del tour: **13.0**

Desde 4: el más cercano es 8 ($w=4$)

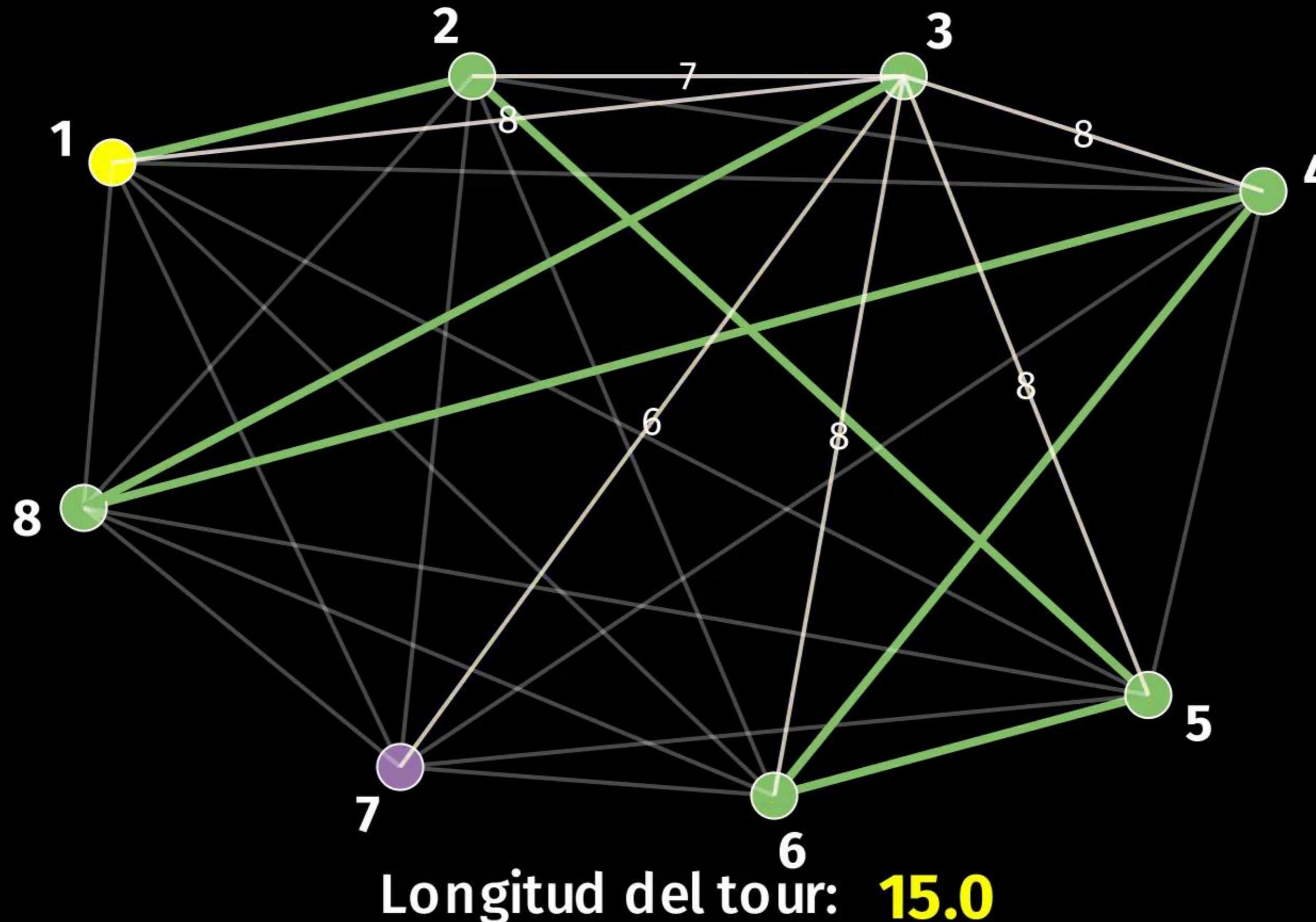
TSP Greedy



Longitud del tour: **15.0**

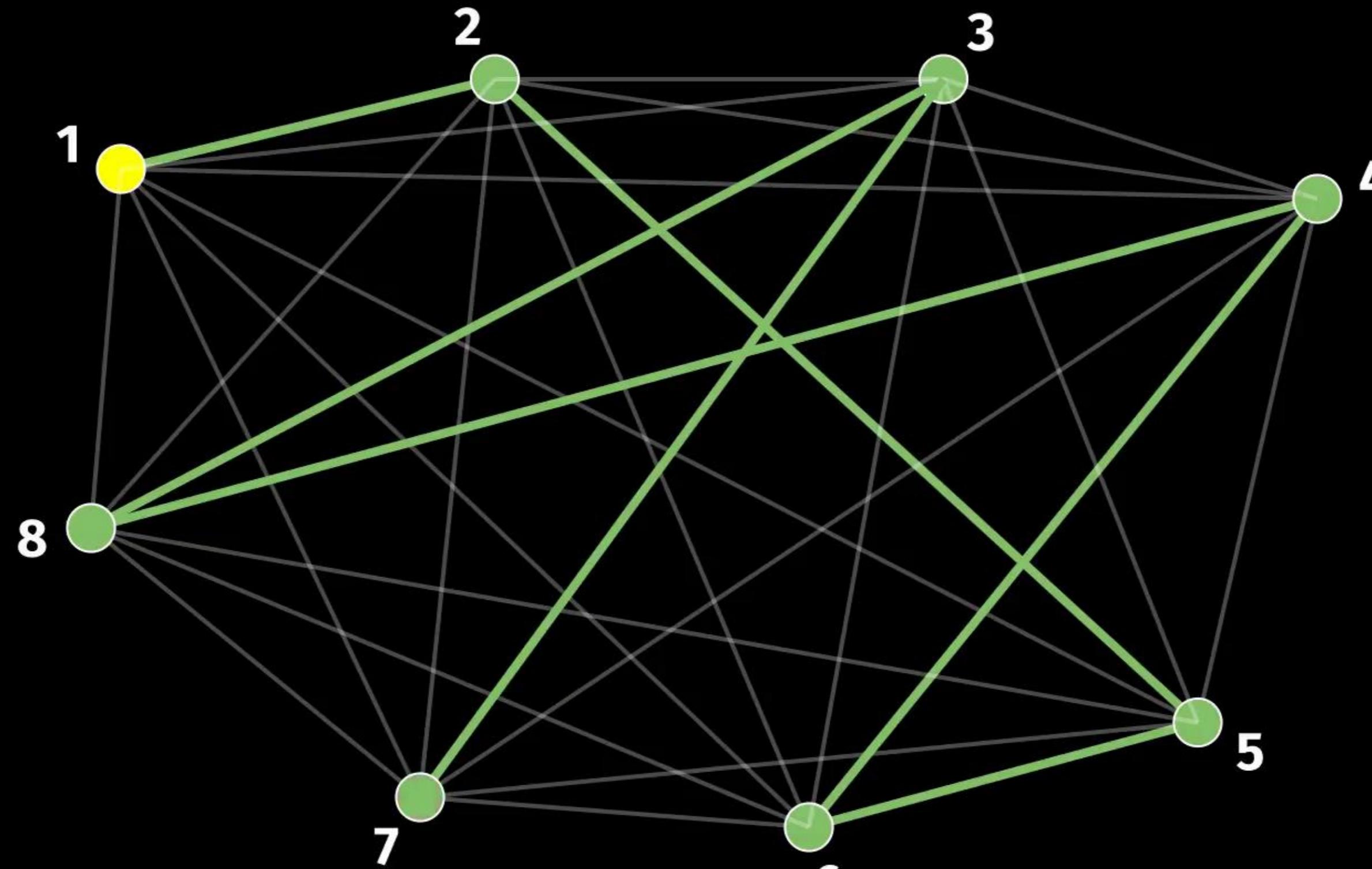
Desde 8: el más cercano es 3 ($w=2$)

TSP Greedy



Desde 8: el más cercano es 3 ($w=2$)

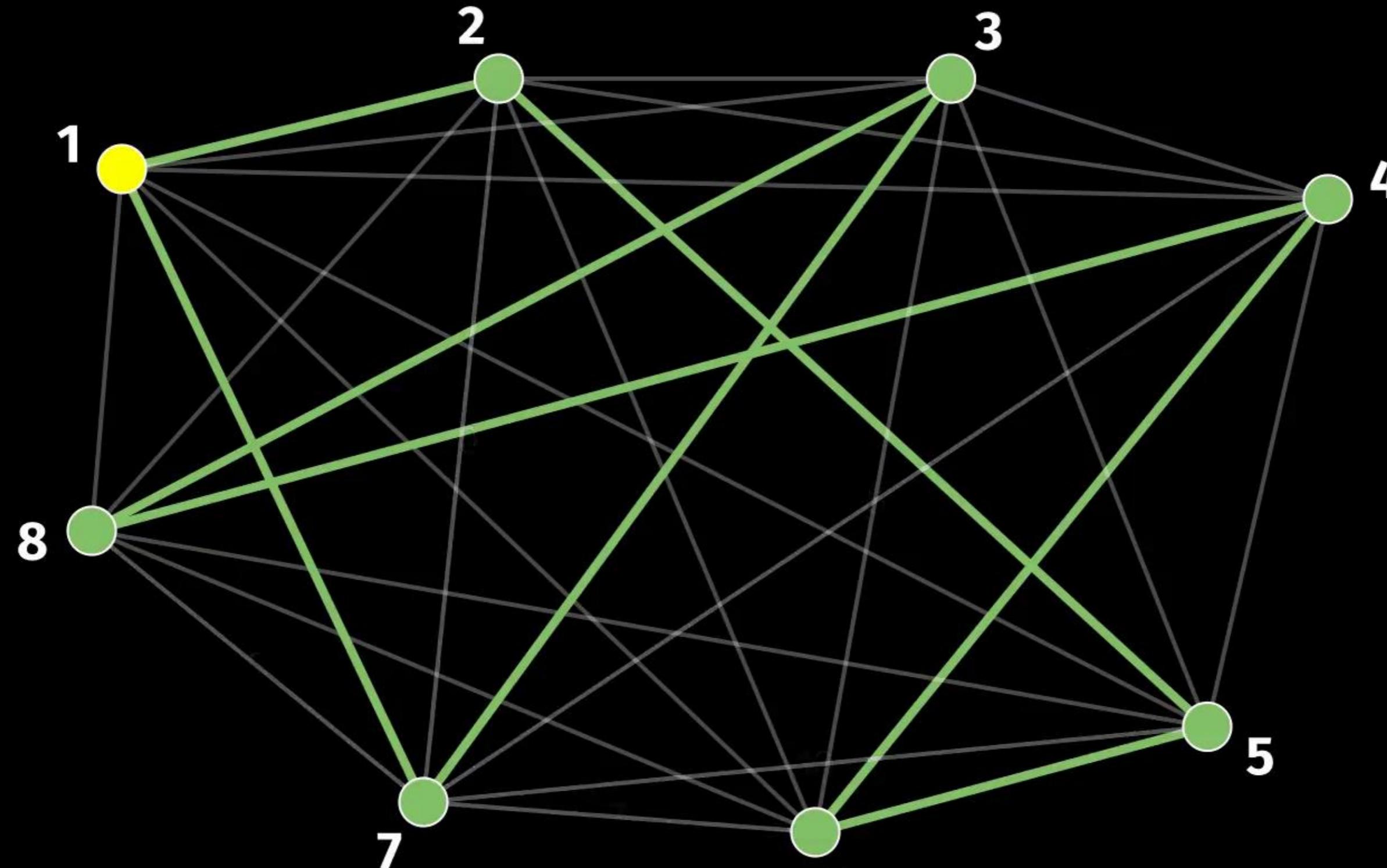
TSP Greedy



Longitud del tour: **21.0**

Desde 3: el más cercano es 7 ($w=6$)

TSP Greedy



Longitud del tour: **30.0**

Cerramos el tour: $7 \rightarrow 1$ ($w=9$)

