INSTITUTO POLITECNICO NACIONAL

ESCUELA SUPERIOR DE CÓMPUTO (ESCOM)

ANÁLISIS DE ALGORITMOS

NOMBRE DEL ALUMNO:

- SANTOS MÉNDEZ ULISES JESÚS

EJERCICIO 13:

- Ejercicios sobre Dijkstra, Prim y Kruskal.

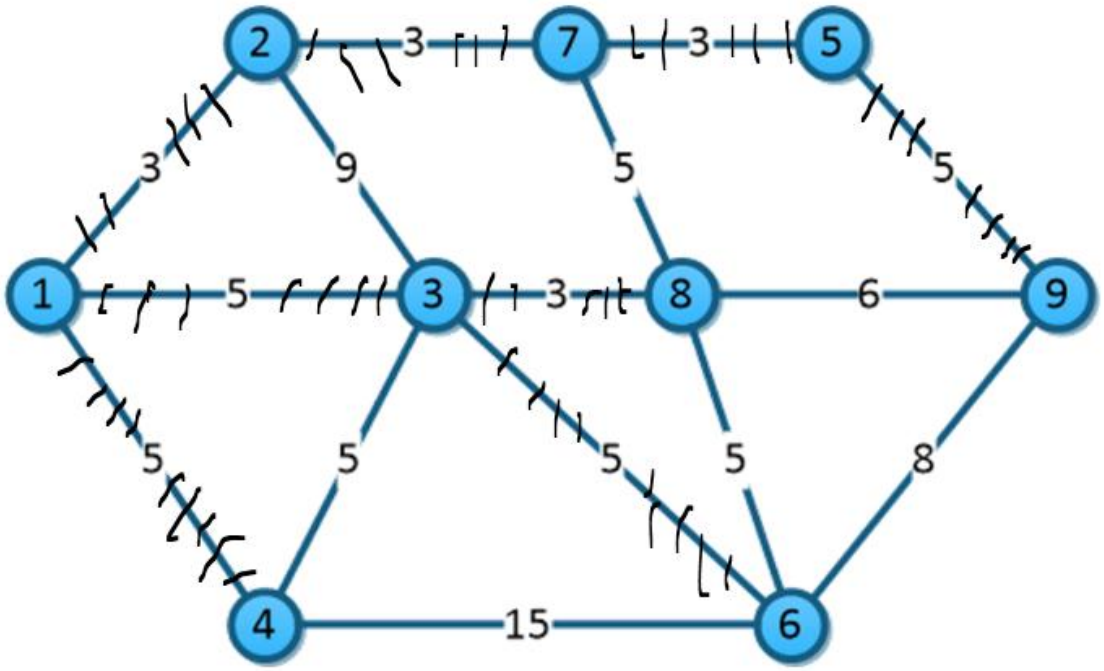
FECHA DE ENTREGA:

- 16/06/2022

GRUPO:

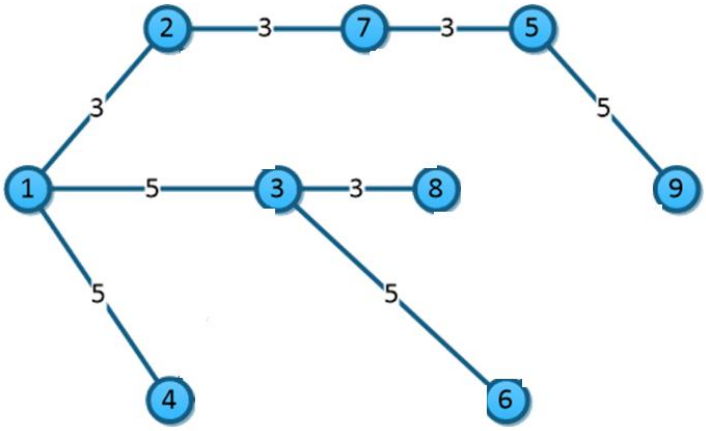
- 3CM14

Ejercicio 01:

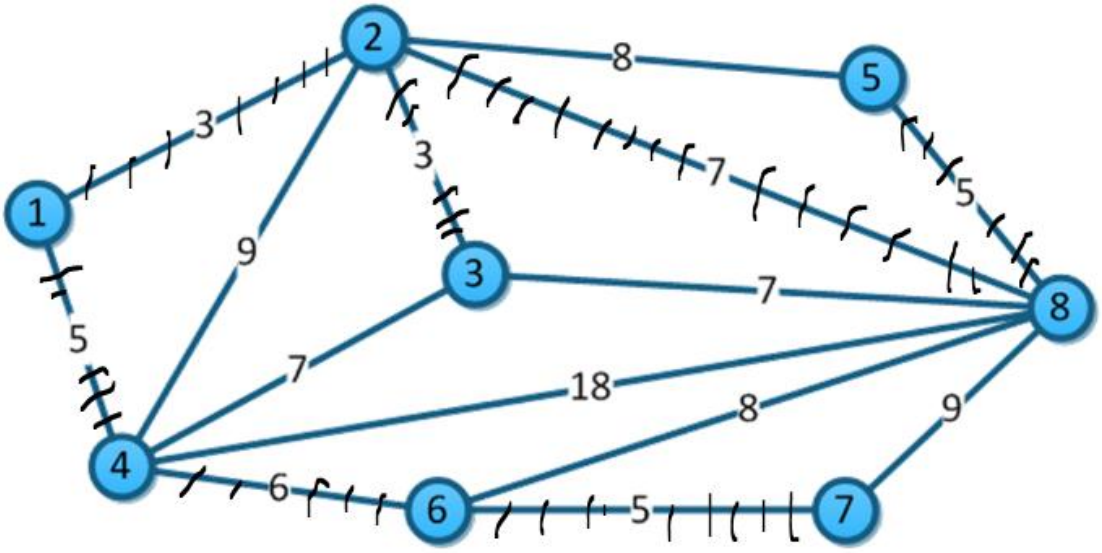


1,2	**3**	✓
2,7	3	✓
7,5	3	✓
3,8	3	✓
5,9	5	✓
1,3	5	✓
7,8	5	×
1,4	5	✓
3,4	5	×
3,6	5	✓
8,6	5	×
8,9	6	×
6,9	8	×
2,3	9	×
4,6	15	×

MST= 12+20+= 32

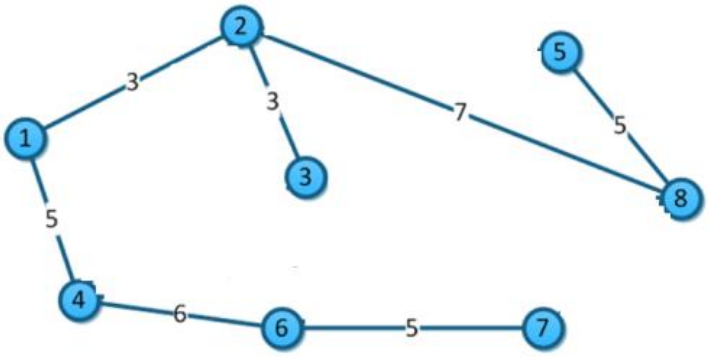


Ejercicio 02:

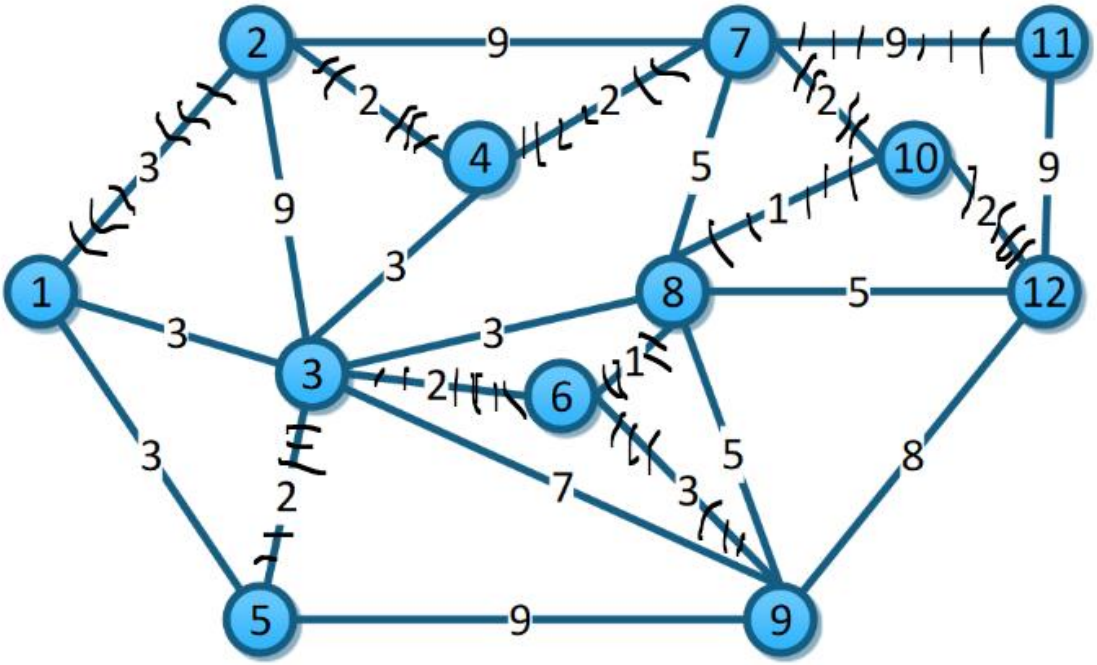


1,2	**3**	✓
2,3	3	✓
5,8	5	✓
1,4	5	✓
6,7	5	✓
4,6	6	✓
2,8	7	✓
3,4	7	×
3.8	7	×
2,5	8	×
6,8	8	×
2,4	9	×
7,8	9	×
4,8	18	×

MST= 6 +15+13 = 34

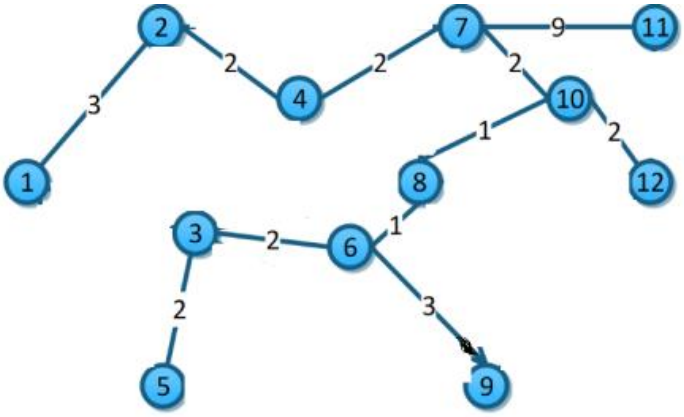


Ejercicio 03:

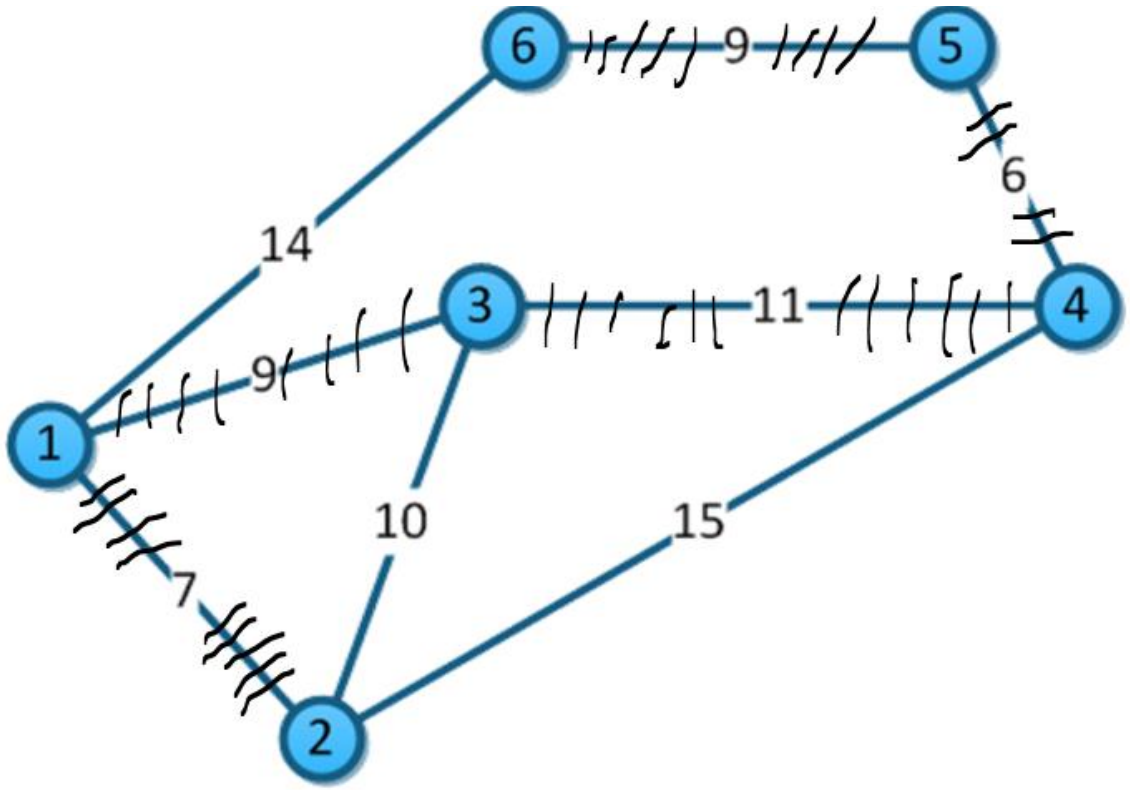


8,10	**1**	✓
6,8	1	✓
7,10	2	✓
10,12	2	✓
4,7	2	✓
2,4	2	✓
3,6	2	✓
3,5	2	✓
1,2	3	✓
1,3	3	×
3,4	3	×
3,8	3	×
1,5	3	×
6,9	3	✓
8,12	5	×
7,8	5	×
8,9	5	×
3,9	7	×
9,12	8	×
2,7	9	×
7,11	9	✓
11,12	9	×
2,3	9	×
5,9	9	×

MST= 2+12+6+9 = 29

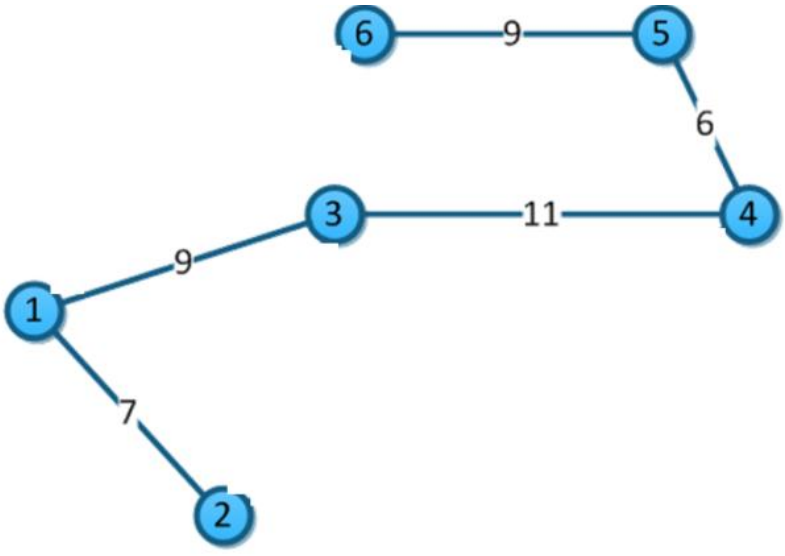


Ejercicio 04:

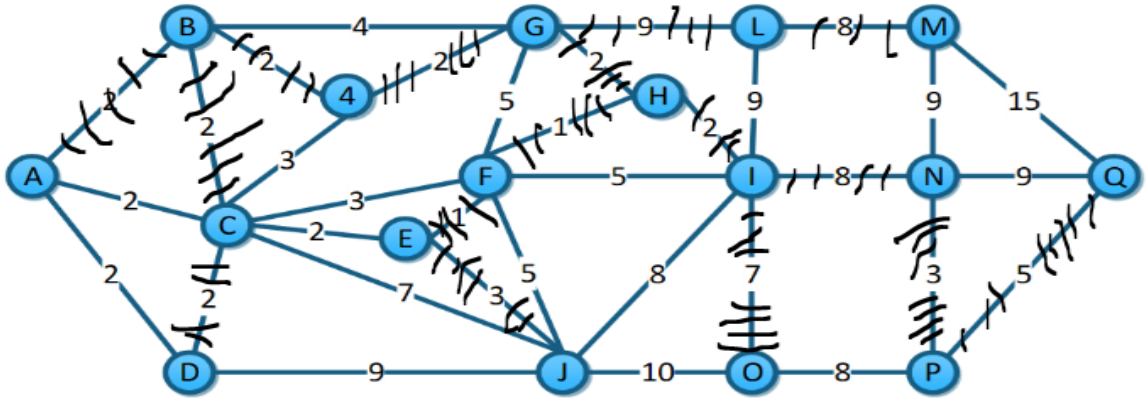


4,5	**6**	✓
1,2	7	✓
1,3	9	✓
5,6	9	✓
2,3	10	×
3,4	11	✓
1,6	14	×
2,4	15	×

MST=6+7+9+9+11= 42



Ejercicio 05:



F,H	**1**	✓
E,F	1	✓
B,4	2	✓
4,G	2	✓
G,H	2	✓
H,I	2	✓
A,B	2	✓
B,C	2	✓
A,C	2	×
C,E	2	×
C,D	2	✓
4,C	3	×
C,F	3	×
N,P	3	✓
E,J	3	✓
B,G	4	×
F,G	5	×
F,I	5	×
F,J	5	×
P,Q	5	✓
I,O	7	✓
C,J	7	×
L,M	8	✓
I,J	8	×
I,N	8	✓
O,P	8	×
G,L	9	✓
L,I	9	×
M,N	9	×
N,Q	9	×
D,J	9	×
J,O	10	×
M,Q	15	×

MST=2+14+6+5+7+8+8+9 = 59