Julian, Ma. Kaethe Joy A.   January 16, 2023
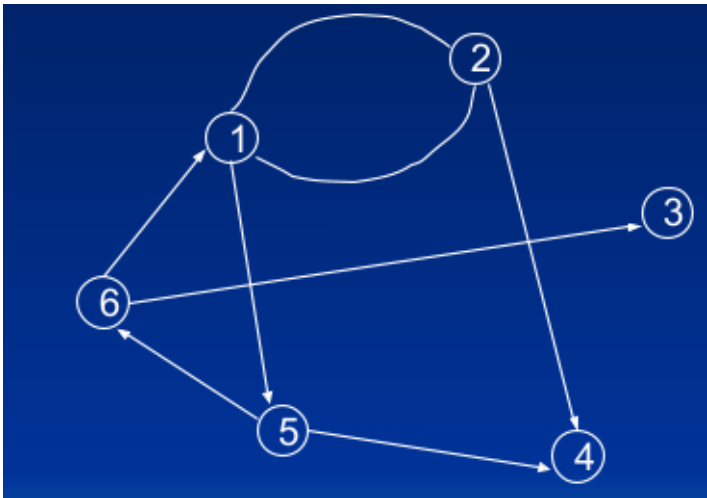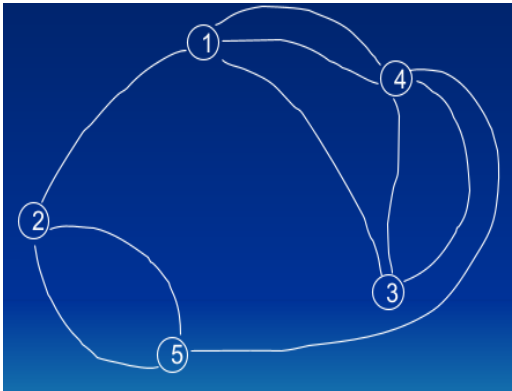
BSCPE 2-1

Exercise on Graphs

$GRAPH_9$

G_9 = (V9, E9)
V_9 = {1, 2, 3, 4, 5, 6}
E_9 = {(1, 2), (1, 5), (2, 1), (2, 4), (5, 4), (5, 6), (6, 1), (6, 3)}
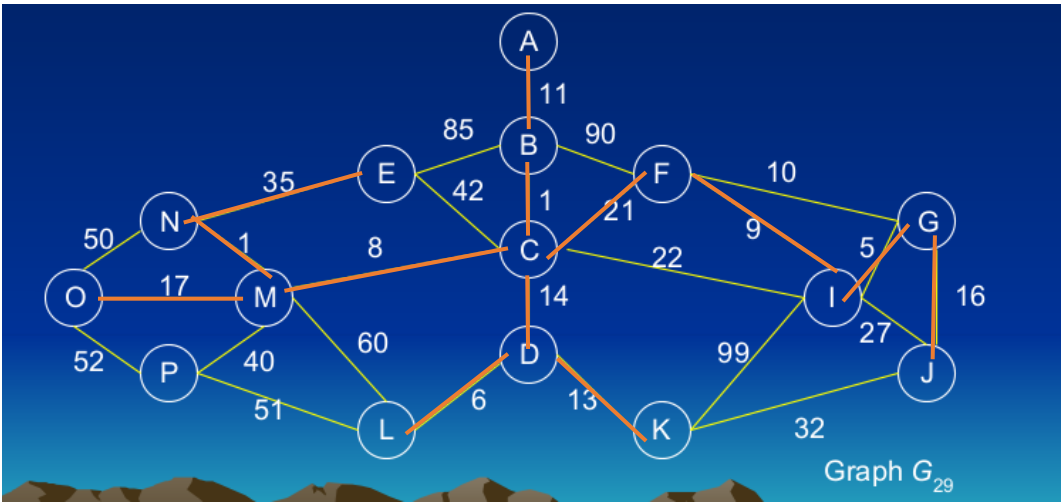
V	INDEGREE	OUTDEGREE
1	2	2
2	1	2
3	1	0
4	2	0
5	1	2
6	1	2

$GRAPH_{10}$

$$G_{10} = (V10, E10)$$
$$V_{10} = \{1, 2, 3, 4, 5\}$$
$$E_{10} = \{(1,4), (2,1), (2,5), (3,1), (3,4), (4,1), (4,3), (4,5), (5,2)\}$$

V	INDEGREE	OUTDEGREE
1	3	1
2	1	1
3	1	2
4	2	3
5	2	1

Graph G_{29}

	Kruskal's			**Prim's**	
Edge (B, C)	w(B, C) = 1		Edge (A, B)	w(A, B) = 11
Edge (M, N)	w(M, N) = 1		Edge (B, C)	w(B, C) = 1
Edge (G, I)	w(G, I) = 5		Edge (C, M)	w(C, M) = 8
Edge (D, L)	w(D, L) = 6		Edge (M, N)	w(M, N) = 1
Edge (C, M)	w(C, M) = 8		Edge (C, D)	w(C, D) = 14
Edge (F, I)	w(F, I) = 9		Edge (D, L)	w(D, L) = 6
Edge (A, B)	w(A, B) = 11		Edge (D, K)	w(D, K) = 13
Edge (D, K)	w(D, K) = 13		Edge (M, O)	w(M, O) = 17
Edge (C, D)	w(C, D) = 14		Edge (C, F)	w(C, F) = 21
Edge (G, J)	w(G, J) = 16		Edge (F, I)	w(F, I) = 9
Edge (M, O)	w(M, O) = 17		Edge (G, I)	w(G, I) = 5
Edge (C, F)	w(C, F) = 21		Edge (G, J)	w(G, J) = 16
Edge (E, N)	w(E, N) = 35		Edge (E, N)	w(E, N) = 35
Edge (M, P)	w(M, P) = 40		Edge (M, P)	w(M, P) = 40
	Total: **197**			Total: **197**