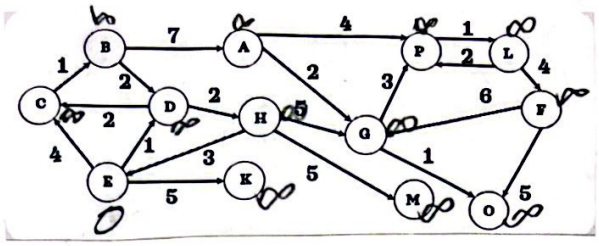
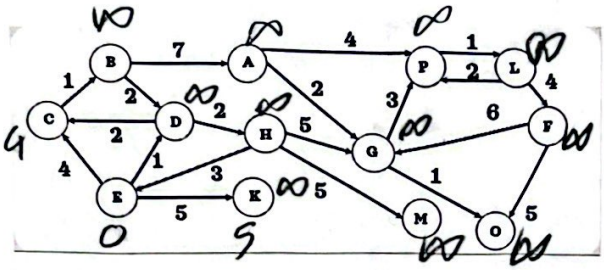
Zain A.
Assignment 7
Question 1

Visited[E]

Current is E



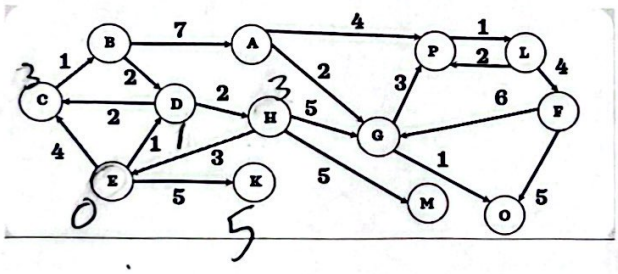
- Initialize all distances to ∞
- Set the distance to target to 0.
- Add start (E) to visited nodes



update C, D, and K

Visited[E,D]

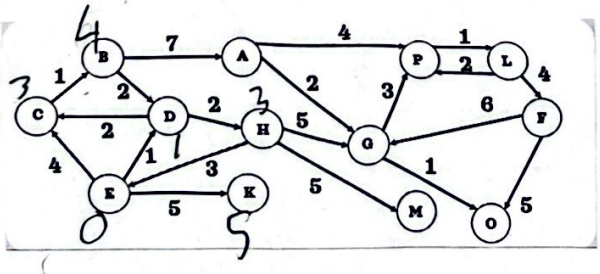
Current is D



D has the lowest cost, D is now visited
update costs

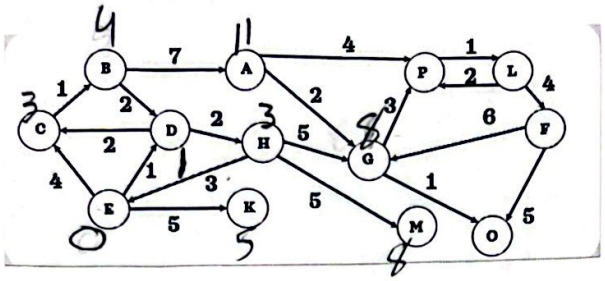
Visited[E,D,C]

Current is C



C is now visited
update costs

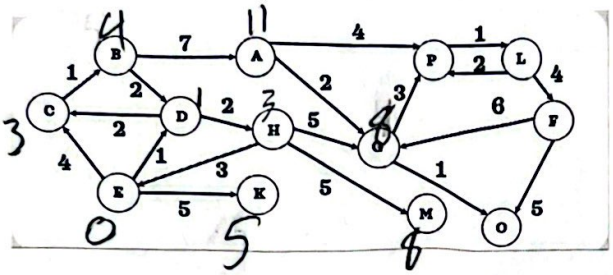
visited[E,B,C,H]



H is now visited
Update costs

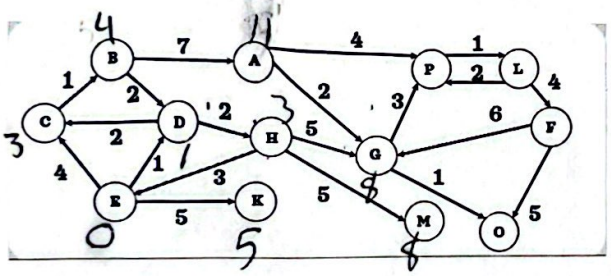
H,B

visited[E,D,C,~~A,B~~]
visited[E D C H B]



B is now visited
Update costs

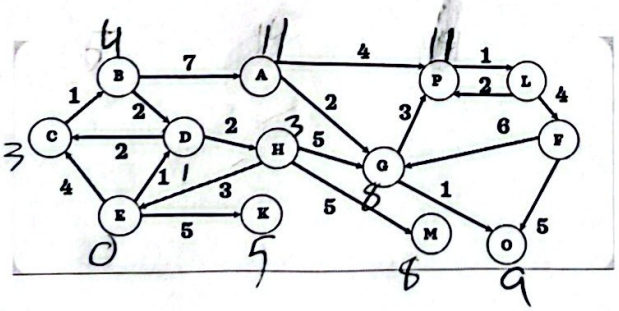
~~visited[E,D,C,K,H,K]~~
Visited[E,D,C,H,B,K]



K is now visited
update costs

~~visited[E,D,C,K,H,B,A]~~

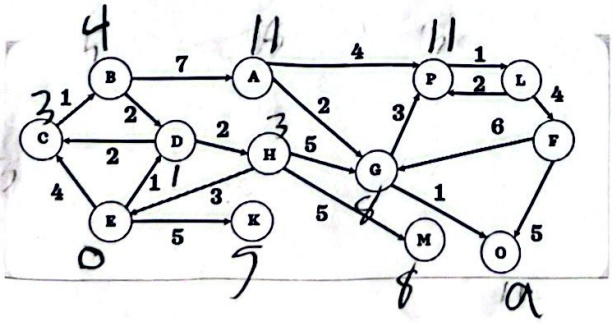
visited[E,D,C,H,B,K,G]



G is now visited
Update costs

~~visited[E,D,C,K,H,B,A,G]~~

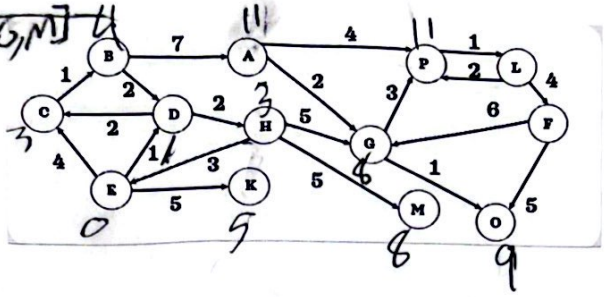
Visited [E,D,C,H,B,K,G,O]



O is now visited
Update costs

~~visited[E,D,C,K,H,B,A,G,M]~~

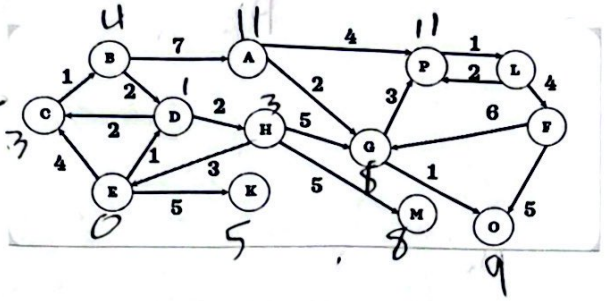
visited[EDCHBKGOM]



M is now visited
No costs is updated

~~visited[E,D,C,K,H,B,A,~~
~~G,M,O]~~

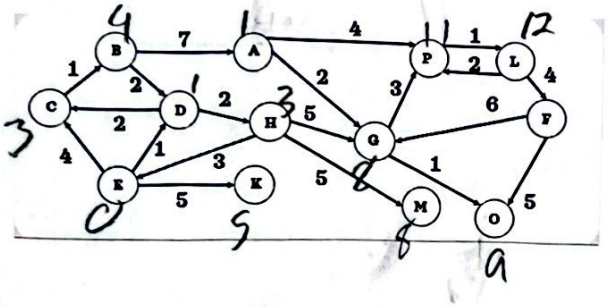
visited[EDCHBKGOMA]



A is now visited
no costs updated

~~visited[E,D,C,K,H,B,A,~~
~~G,M,O,P]~~

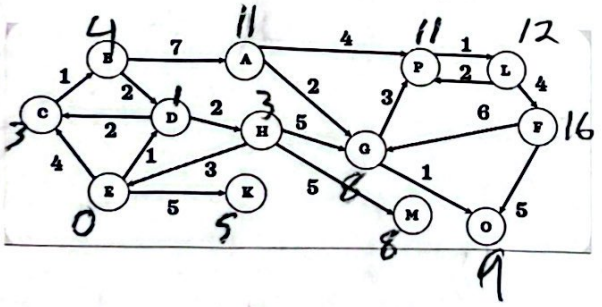
visited[EDCHBKGOMAP]



P is now visited
update costs

~~visited[E,D,C,K,H,B,A,~~
~~G,M,O,P,L]~~

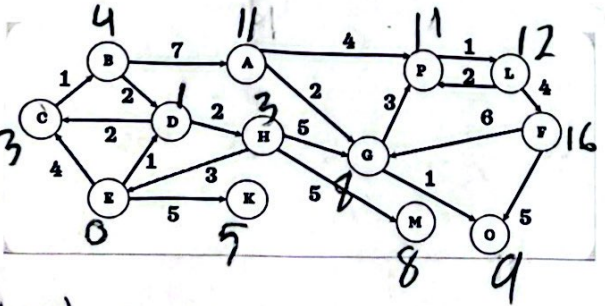
visited[EDCHBKGOMAPL]



L is now visited
update costs

~~visited[E,D,C,K,H,B,A,~~
~~G,M,O,P,L,F]~~

visited[EDCHBKGOMA
PL]



F is now visited
update costs

Final costs

E	D	C	H	B	K	G	O	M	A	P	L	F
0	1	3	3	4	5	8	9	8	11	11	12	16