Hathik Agsona classante 1BM1 8CS/34 Cycle 2 lab @ 3 from collections impost defoutdict class graph() def - Init - (SEIF): Self-edges - default dict (list) 501F. waght = {} det addage (self, From - Pudo, to Audo, avoight); Sef. edges [from-rode] append (to-rode)

Self. edges [to-node] appent (from-rode)

Self. weight & Groom-rode, to-rode) ] = weight Seif. Weights [ Cto-rade, from rode) ] = weight def dissktog (goph, initial, and): Shootest paths = {initial: (None, 0)} Current-pode = initial Visited - Set () While current node ! = cold: Visited. add Courrent: noda) weight-to- cuosent node shortest-pathlowson+nodo][i] for pext-pod in destinations: weight = good weights [ Euxon+-node, nox+-node)] of weight-to - Cuxxent hoda if next-pade not in shortst-path: Shuxbest-paths Enox+-nodo] -(current-rode, weight) Pulse:

	HANTHIK AZBANO/ IBM18CS134
	Cusson+-Shortest-wayn+=
- 1	Shortest-paths Enext-node ] []
	to the total the support and all the
1	if current-shortest weight ) breight:
1	Shortest-paths [next-node]
, a'	(Cussent-node, weight)
	Sed-odgoe - default dut Chest
7-	nost-Pathators = Spode: Shortest-paths Enado] b
1-	for nude in shortest paths if podo
/	not in visited 3
-	Col place Thin made I approd the Pide
	if not next-destinations
1- 63.60	CUOSENX-Node= min (next-destination,
1	Kay = dambda R: nox + destruction  ER355)
	part []
~	Caxxon pode = 10 traf
\[ \sigma_{	while Current-nod is not Nona
<u> </u>	pathappen+ (Cuasen+-pode)
-	noxt-node = shortest padhs
N- 1-1	[cappent-hode][0]
-	(USBA+-Dode= Dest-Dode
	Taken to be a little of the li
-	pam=pah [: 1]
0 400	The state of the property of the state of th
South to	point ('show test weights: ', Eur own - showtest-woight)
	- Elmin + coll ching to shoot in it
	( the same was the same