	Graph Theory	
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Banana	O.5€	4	
Cookies	1€	3	
Rice	1.5€	5	
Spinach	1 €	4	
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Theoren 3.5 Lot D= (V, A) be a connected graph SEV & l: A > Z a weight function on the edges, such that there is no directed circuit of negative length in D. The B-Falgoritan computes the shortest both for all the If D= (V, A) & a directed graph without negative edges, then d(V) = 8(8, V) + VEV Let re be any restice from V. Consider Shortest bath & from Sto v with min. no of edges. 8 (S, Vi) = 8(S, Vi-1) + l(Vi-1, Vi) We lenow, S(S,S)=0 After first steration, d(v,) = d(vo) + l(vo, v,) = 8(05, Vo)+ Q(Vo, Vi) -8(S,V) After Second pass, a(v2) = a(v,) + l(v, v) = 8 (S, V2) After no fass, d(vn) = 8(5, Vn) that testions confute state fath 3

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