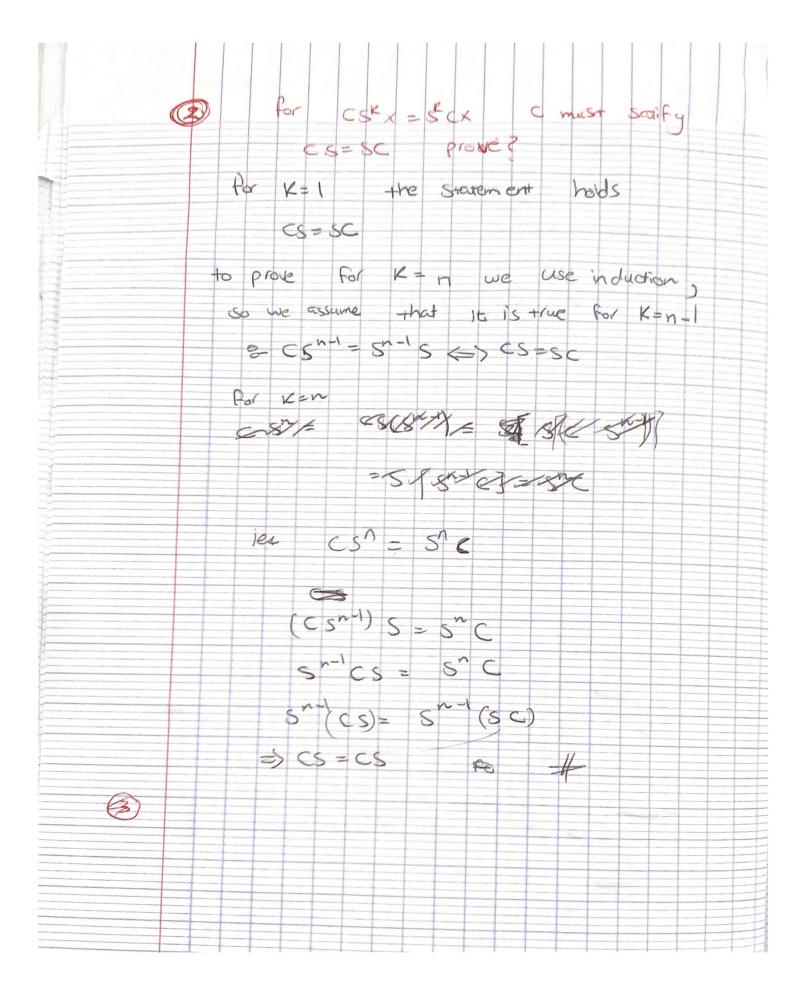
Not solved for att if the gran is complete to there is no edge feature, the condutional GNN For GO CGINN 0h; = Ø (x; 9 B C U (x))) for a complete graph C, = C h; = Ø(x;) @ c 4 (x;) 1et @ c ψ (x) = B &; hi= Ø (xi>B) => Øz(xi) => deep set Lec 7: F 86 G 98=K 8-X = SKX where Sx is shift main's proof 4814 EG 8-4 = h-9

- SKI SKZ = SKI + SKZ = SKI + SKZ @ ig < x3@5tr> = < x5r5 also (SK) + (SK) - (ST) K this must be sunshed for all K 1 + we must prove that I or all KeV=SV I now by induct a let K=1 3 N= SV (Proof-5 for K = n-1 and assume it is there to > v=S'v = v=SV. and for K=n 8-V= 5 V = S (S 1 - 1) = SV thus Hen we proved for ken the Statenon



Smust have a set of d linearly independent eigen vectors. K takes values from 1 to & so we atready have all the desgen vectors Since (Cx); = 2x = 2q 5 x); any convolution communes with S $e_{x} = \sum (\alpha_{x} s^{2} x)$ $CSX = \sum_{L} \alpha_{L} S^{L}SX = \sum_{L} \alpha_{L} S^{L}X$ SCX = Z1 2 5 X CSX = SCX