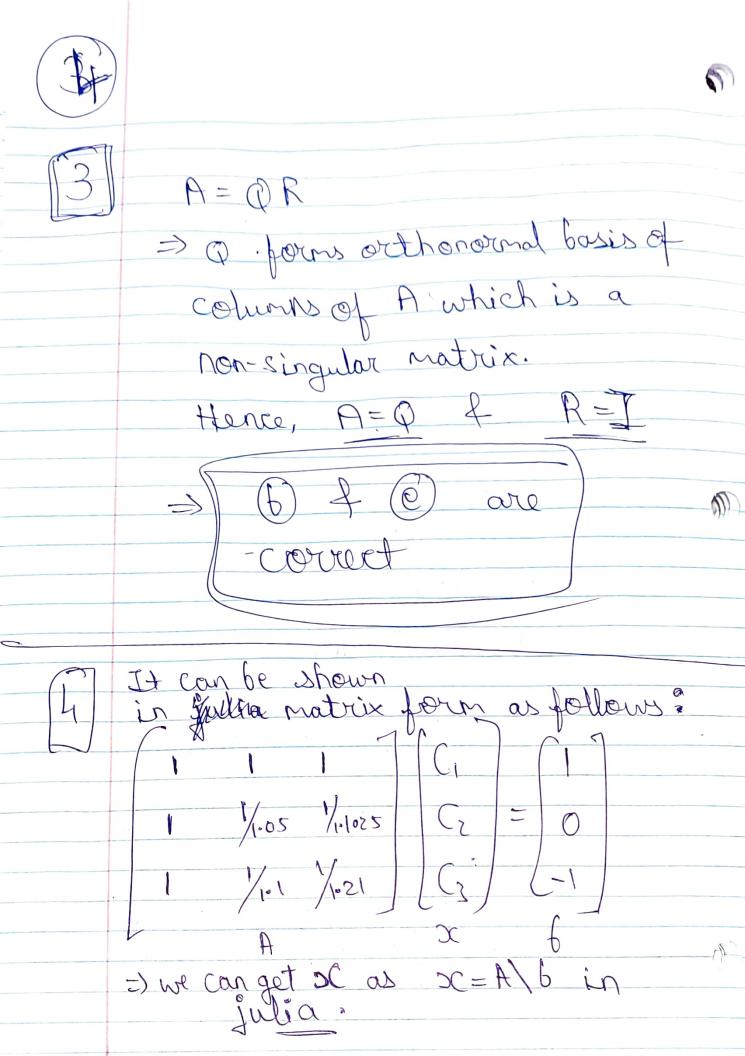


a, an an-1 · · · az az C = 0 (*) b = On apri ap-2 ... az aj 5 + 1 = n + 1 or 2n + 1 o =) 1+g= N+1 So the for a given value a, as C=a & b can be represented as matrix Tc (a) & b ors trc (a) b = C => Thus, c [a 36] is a linear function





 $C_{z} = -41.99$ [Code in the Code in th

a Validation

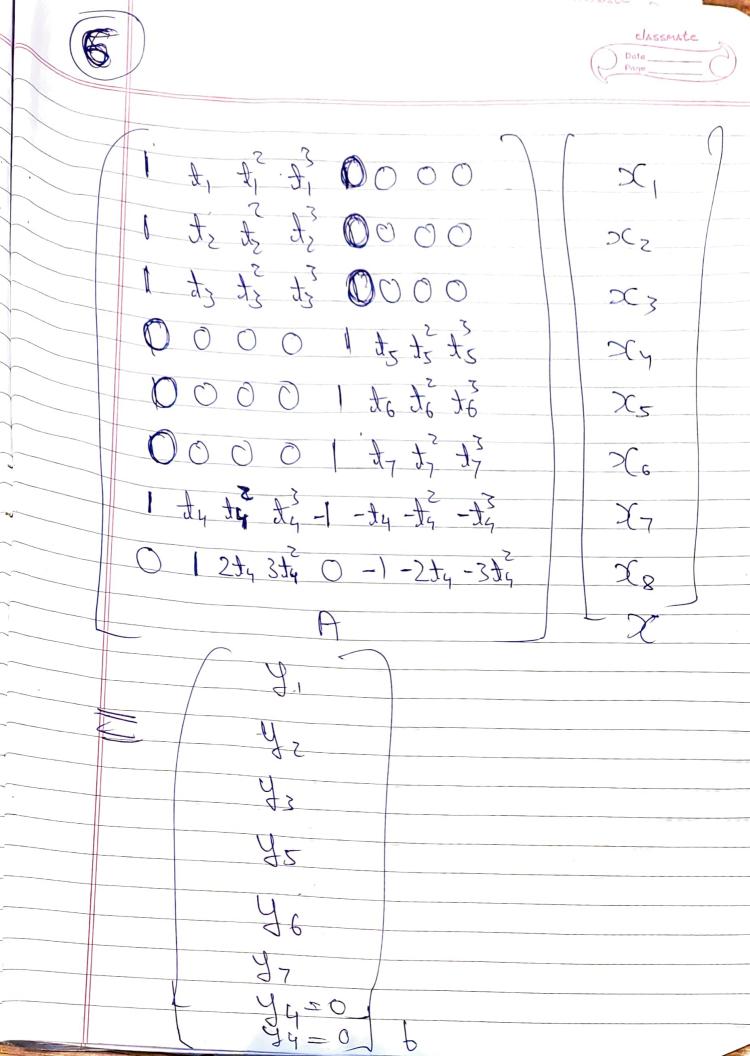
(b) K-nears

C Validation

d Roquiarization

e) Loust Squares

I the eight conditions can be tanion of the towns of disconditions of the conditions are the towns of the conditions are the conditions are the conditions are the conditions are the conditions of the conditions are the con





See ipynb to get the values of $x_1, x_2, x_3, x_4, x_5, x_6, x_7, x_7, x_8.$

Also, plotted in I graph for both polynomials.

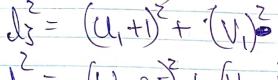


d=. lit lit lit lit ly t list + list

2

 $\int_{1}^{2} = \left(\frac{1}{\sqrt{1 - \sqrt{2}}} + \left(\frac{1}{\sqrt{1 - \sqrt{2}}} \right) \right)^{2}$

 $J_{2} = (U_{1} - U_{3}) + (U_{1} - U_{3})$

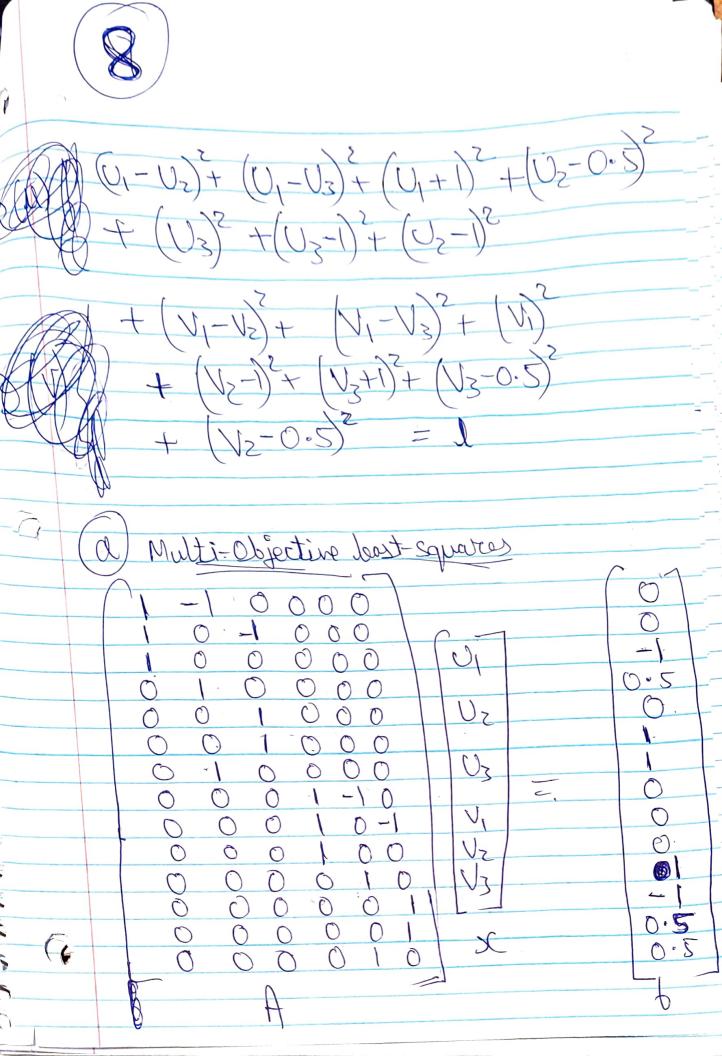


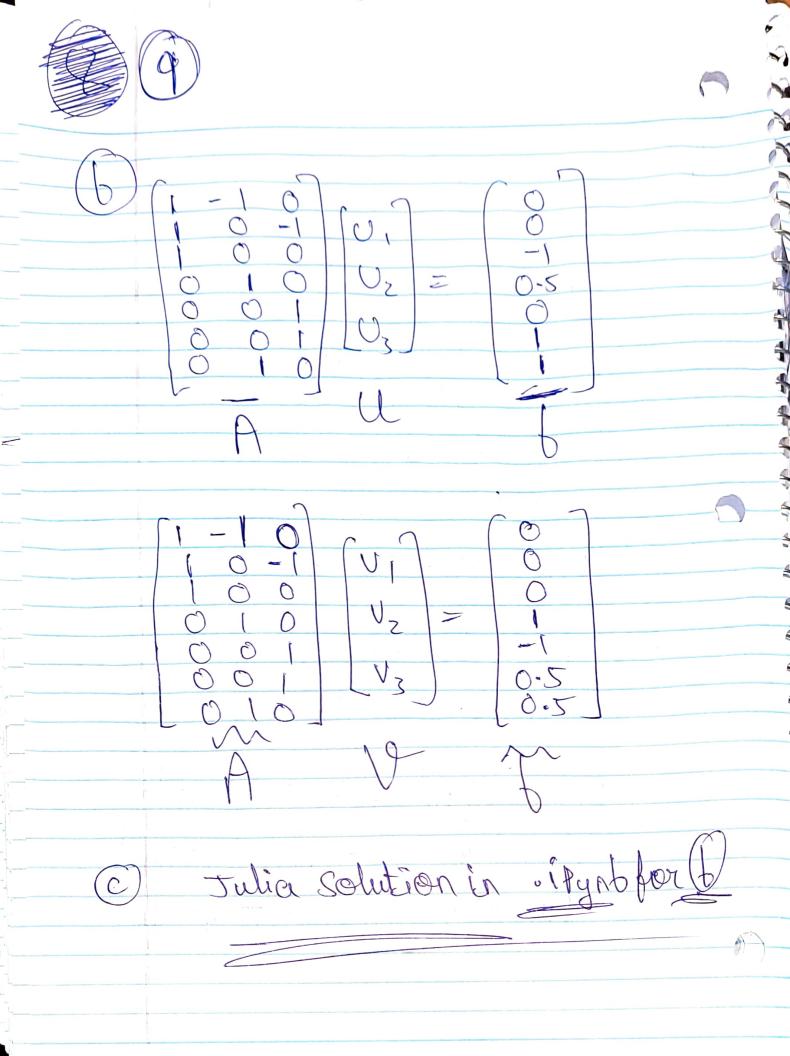
 $d_{4} = (U_{2} - 0.5) + (V_{2} - 1)^{2}$

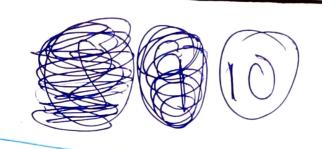
$$J_{5}^{2} = (0^{2})^{2} + (1^{2} + 0^{2})^{2}$$

$$J_{5}^{2} = (0^{2})^{2} + (1^{2} + 0^{2})^{2}$$

 $\int_{2}^{2} = \left(\int_{2}^{2} - \int_{3}^{2} + \left(\int_{3}^{2} - 0.2 \right)^{2} \right)$





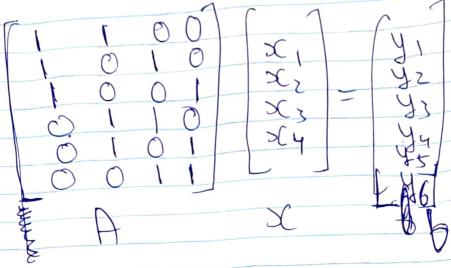


6 equations

J34= X3+ X4= 46

Minimize. X for as





Q is a montrine with orthonormal columns

L. b = |R |

Q Satisfies Q Q = |

=> To solve Q x = f,

we see Q x = P f

