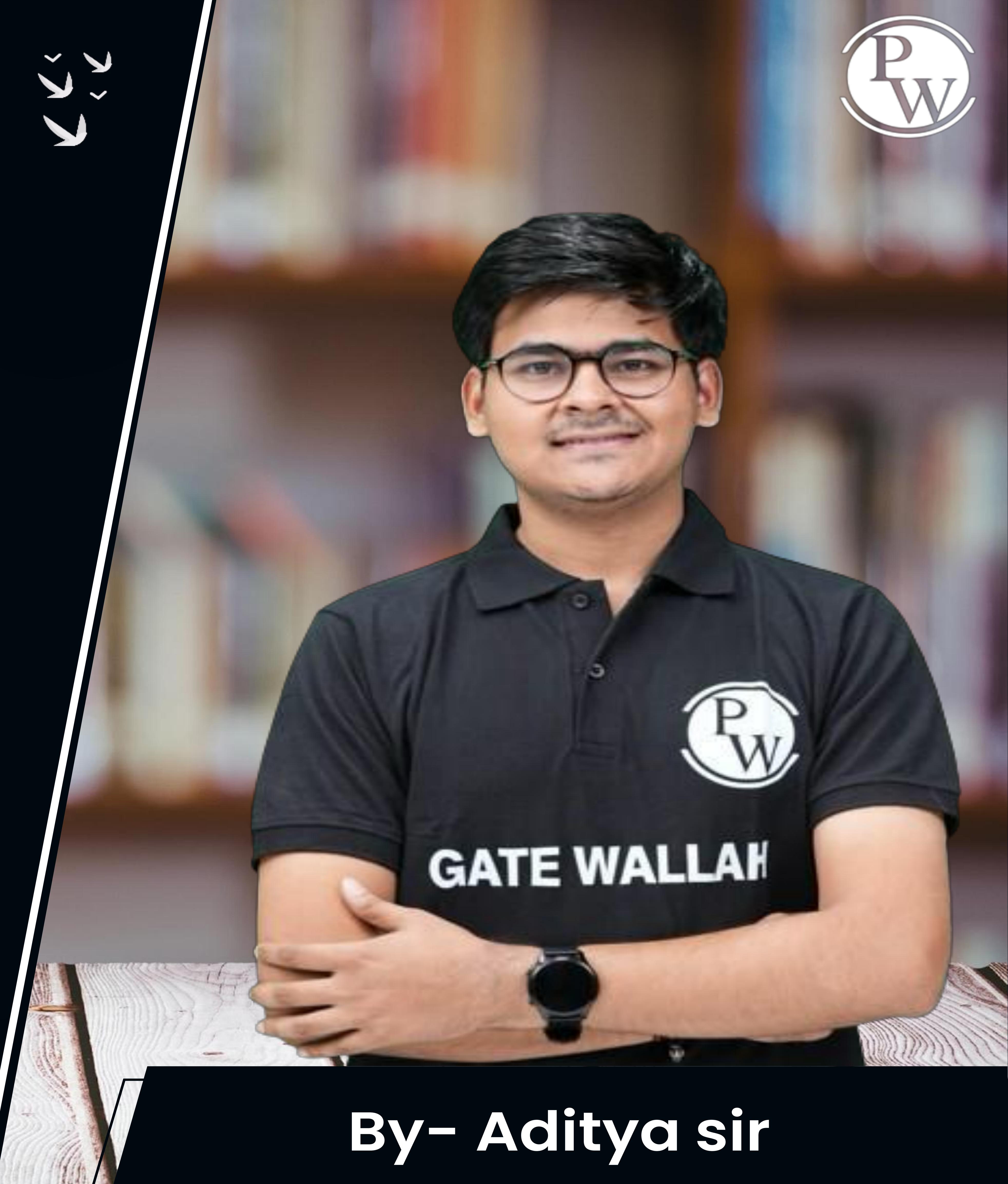
TCS NQT

Programming Problems with implementations



Trees & Graphs-01

Lecture 11





About Aditya Jain sir



- 1. Appeared for GATE during BTech and secured AIR 60 in GATE in very first attempt City topper
- 2. Represented college as the first Google DSC Ambassador.
- 3. The only student from the batch to secure an internship at Amazon. (9+ CGPA)
- 4. Had offer from IIT Bombay and IISc Bangalore to join the Masters program
- 5. Joined IIT Bombay for my 2 year Masters program, specialization in Data Science
- 6. Published multiple research papers in well known conferences along with the team
- 7. Received the prestigious excellence in Research award from IIT Bombay for my Masters thesis
- 8. Completed my Masters with an overall GPA of 9.36/10
- 9. Joined Dream11 as a Data Scientist

- 10. Have mentored working professions in field of Data Science and Analytics
- 11. Have been mentoring GATE aspirants to secure a great rank in limited time
- 12. Have got around 27.5K followers on Linkedin where I share my insights and guide students and professionals.







Telegram Link for Aditya Jain sir: https://t.me/AdityaSir PW

(1.1) How many nin operations are seed of to make all clems soual in the given curray. I operation: pick a [i] and summering (n-1 olus (+) inco

Op: Stepp: pick fund 2 elu

7 9 8 Chral I Ans: (3 Open (+1) Open 1 grap Doner 2 gap

isgic: over -s(+1) gap inco - Enceller olins Soln! Bruth Force! Sost: & pick the max elin until all elev adual

array Sorted $\Rightarrow a(o) := a(n-1)$ (min = = max)

rux Steps = 0 Sox (a a en) mine (a(o) = a(n-1) for (i = 0 m-2) Openath 011000

S624 (9,94V) Ahorn appr -> O (nº logn)

Appr2: Optimised (direct approach) all (n-1) elm -3 +) 1 angus desousing Oller 1

hem decrensi Snellest elm renain dens Sum of outire array -> Sum smallert olen - s m. Sum - M # m

eq:
$$(4,3,4)$$

Sum: $4+3+4=(1)$

min-clen= $\frac{3}{4}$
 $11-3\times3=\frac{11-9}{4}$
 $11-3\times3=\frac{11-9}{4}$
 $11-3\times3=\frac{11-9}{4}$

9 cm: 6 + 8 + 7

nser = 6 3 1 sun – n xniv 21-6X3

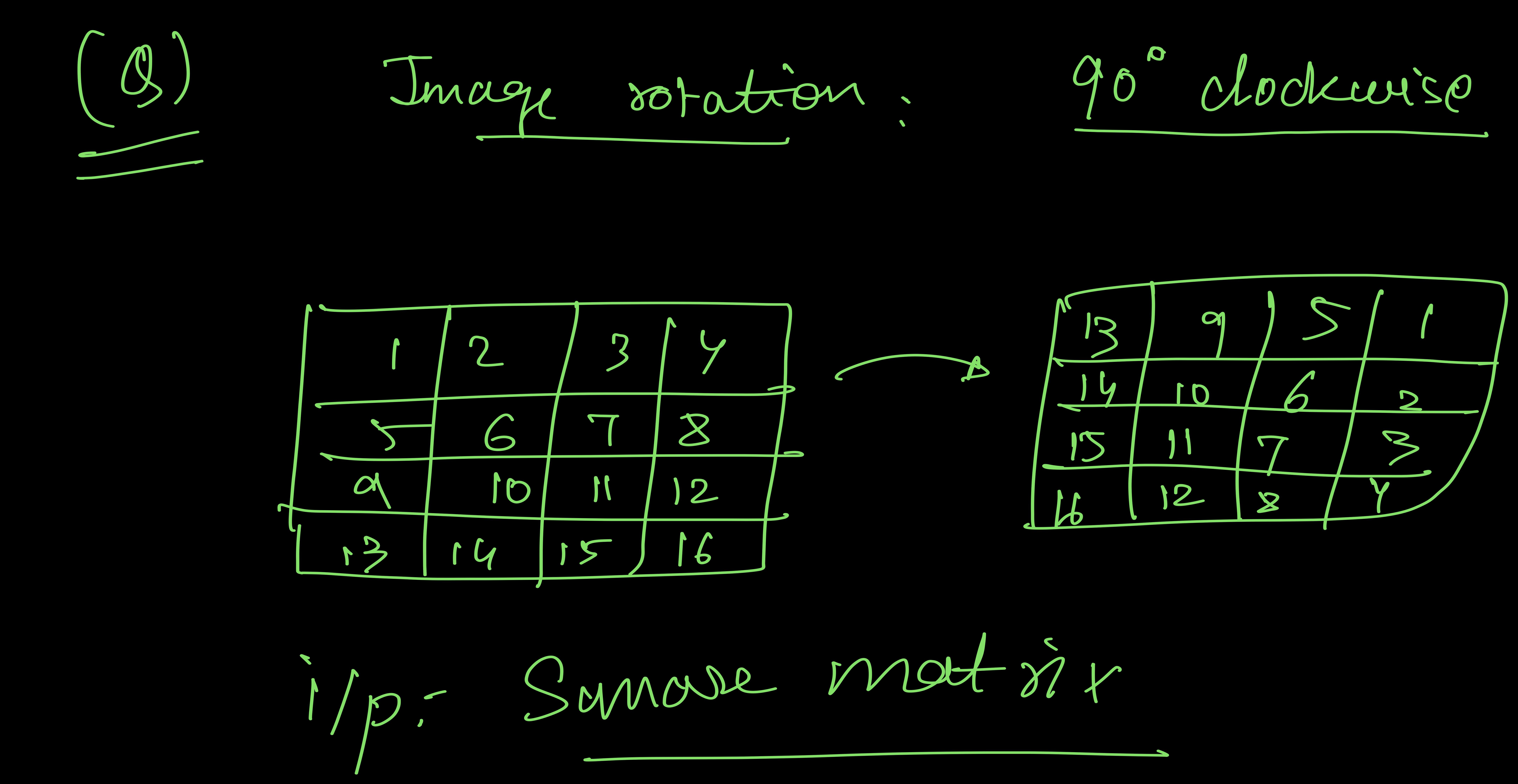
 $6+8+7-6\times3$ 6-6 8-6 7-6 8euch 2euch 2

(g.2) Søsting a given mat six: (strict)

292-15 47 578

6000 -

veetor 2 just 1 MCHXX Styll- pert all Necto & VI Stop37 Sist the nector Stery: Put back into the matrix.



(g.4) Find Trampose of a madrix. exchange rouse == cols.





Happy Learning THANK - YOU