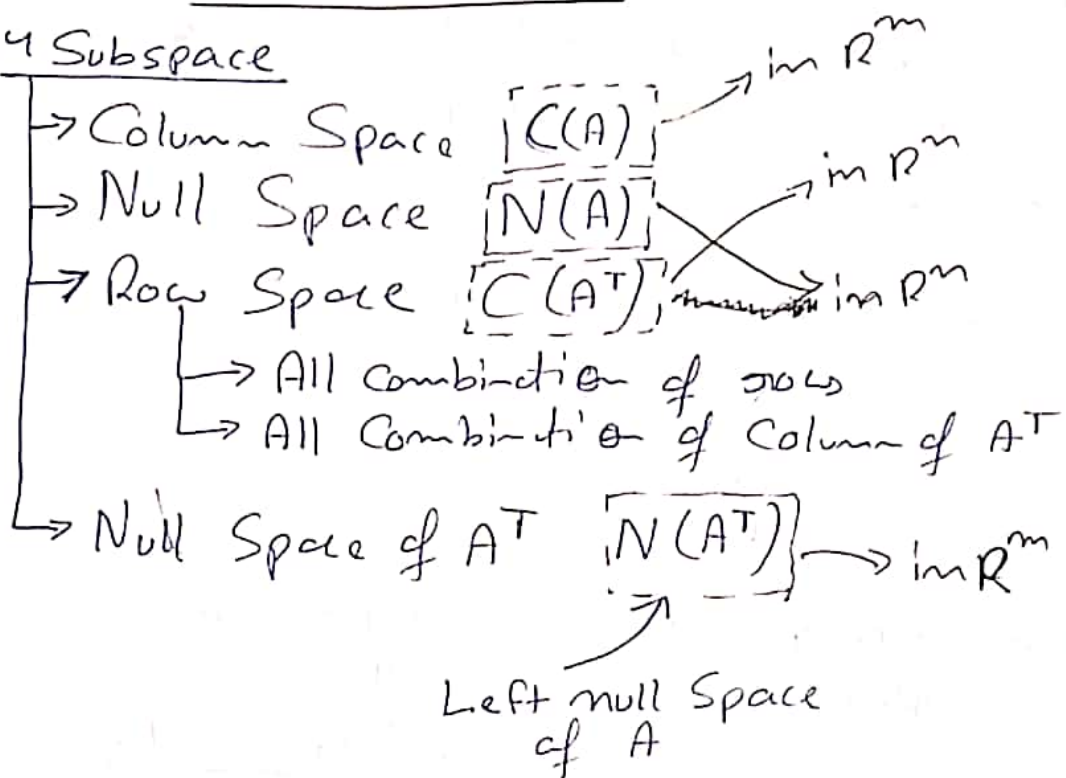


Lecture - 10

#4 Subspace



dimension of Row Space = dimension of Column Space = Rank of A

dimension of Null Space of A = $n - \text{Rank}$

dimension of Null Space of A^T = $m - \text{Rank}$

New Vector Space! $(M) \rightarrow$ Matrix Space

\rightarrow All 3×3 matrices!! {matrices follow all the rules of vector}

Subspace: \rightarrow All upper Δ matrix
 \rightarrow All symmetric matrices.
 \rightarrow diagonal matrix