SVD

THEORY

1) SVD (Singular Value Decomposition) is basically a matrix factorization technique, which decomposes any matrix into 3 generic and familiar matrices. It has some applications in PCA, Machine Learning and Image Processing.

2) $A \in Mat_{m \times n}(\mathbb{R})$ can be decomposed as:

$$A = U\Sigma V^T$$

where, $V \in Mat_{n \times n}$, $U \in Mat_{m \times m}$, $\Sigma \in Mat_{m \times n}$

QUIZ