⇒ DIMENSION 8-

The number of element in the finite basis of a vector space $V(F)$ is called the dimension of the vector space. It is denoted by $\dim V$ and if $\dim V = n$ then V is called n-dimensional vector space.

Finite Dimensional Vector Space :-
A vector space $V(F)$ is said to be finite dimensional vector space if it has a finite basis.

Infinite Dimensional Vector Space :-
A vector space $V(F)$ is said to be infinite dimensional vector space it has a infinite basis.