Abstract

The Standard Young Tableaux are used to label the basis vectors of the standard or Young Yamanouchi basis of the symmetric group. There is a one-to-one correspondence between the eigen values of the Complete Set of Commuting Operators-I (CSCO-I) of Symmetric group of degree n (Sn) and the Standard Young Tableaux(SYT). In this paper, a new graphical method to index and retrieve the standard Young tableau for a partition of degree n in Sn is presented. This method is illustrated with an example using a partition of degree 6 in symmetric group S6.

References

- Chen J Q, Group Representation theory for physicists, World Scientific publishing Co. Pvt. Ltd., 1989

**Index Terms**

Computer Science

Applied Mathematics

**Keywords**

Symmetric group; Standard Young Tableaux; indexing; retrieving; CSCO-I