



**SNS COLLEGE OF TECHNOLOGY**  
**Coimbatore-37.**  
**An Autonomous Institution**



**COURSE NAME : 23CAT602 - DATA STRUCTURES & ALGORITHMS**

**I YEAR/ I SEMESTER**

**UNIT – III SORTING & SEARCHING**

**Topic: Hashing**

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# HASHING



Hashing is a technique or process of mapping keys, and values into the hash table by using a hash function. It is done for faster access to elements. The efficiency of mapping depends on the efficiency of the hash function used.

Let a hash function  $H(x)$  maps the value  $x$  at the index  $x\%10$  in an Array. For example if the list of values is [11,12,13,14,15] it will be stored at positions { 1,2,3,4,5 } in the array or Hash table respectively.



# HASHING



## Hashing Data Structure

List = [ 11, 12, 13, 14, 15 ]

$$H(x) = [ x \% 10 ]$$

$11\%10$     $12\%10$     $13\%10$     $14\%10$     $15\%10$

0   1   2   3   4   5

Hash Table

	11	12	13	14	15
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# THANK YOU