FACULTY OF EGINEERING & TECHNOLOGY
DATA STRUCTURE USING C

LECTURE -3

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OUTLINE
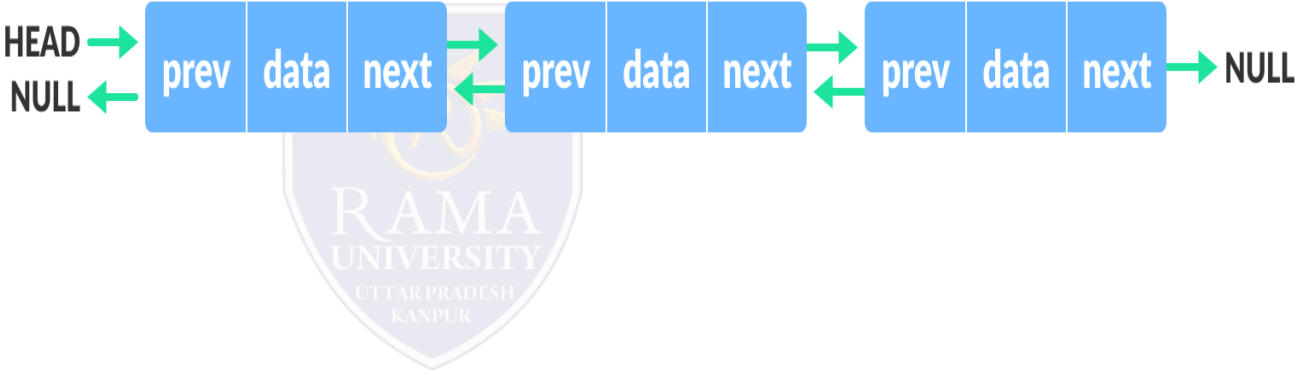
- **Doubly Linked List**

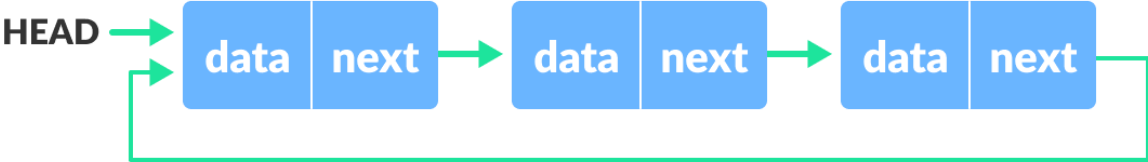- **MCQ**

- **References**

Doubly Linked List

We add a pointer to the previous node in a doubly-linked list. Thus, we can go in either direction: forward or backward.

A node is represented as

struct node {

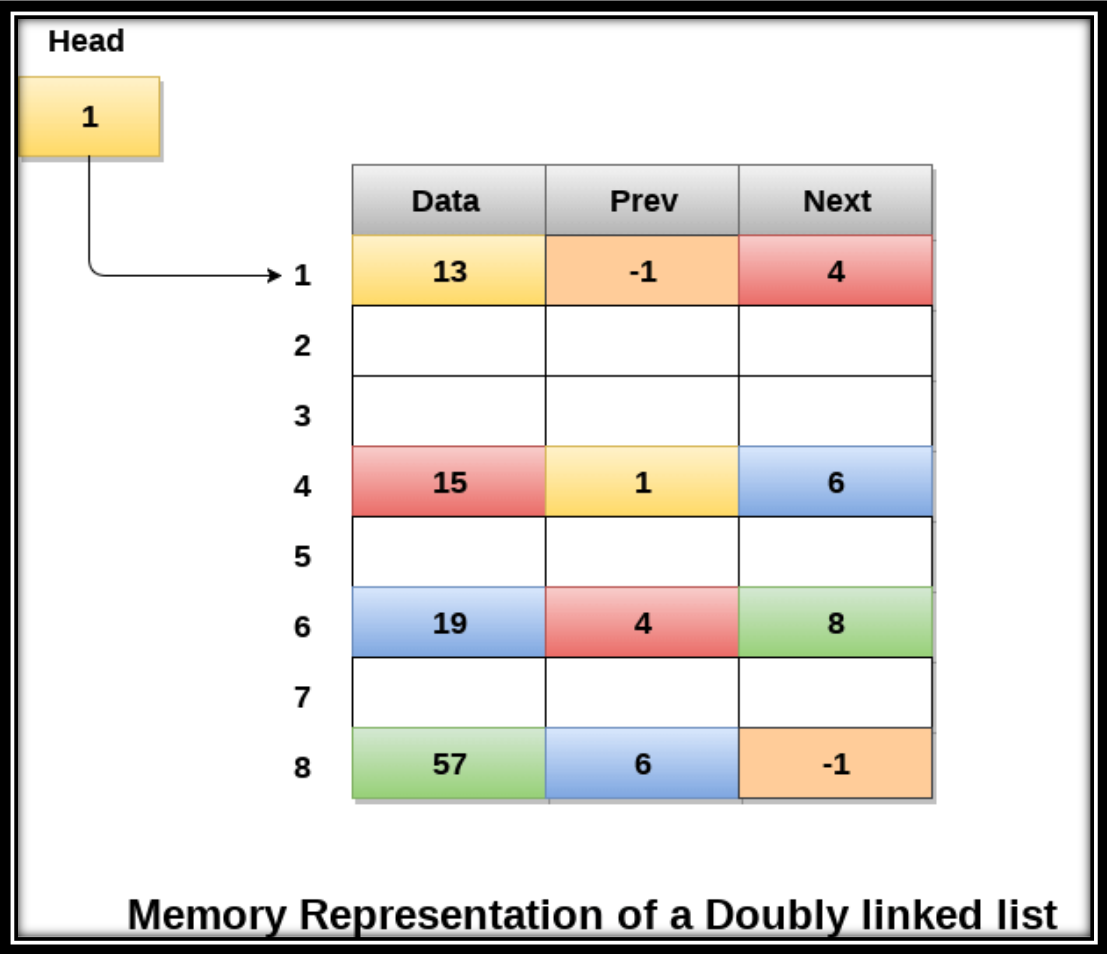 int data;

 struct node *next;

struct node *prev;

}

Circular Linked List

DOUBLY LINKED LIST

Memory Representation of a doubly linked list

Head

1

	Data	Prev	Next
1	13	-1	4
2			
3			
4	15	1	6
5			
6	19	4	8
7			
8	57	6	-1

Memory Representation of a Doubly linked list

MCQ

QUESTION	OPTION A	OPTION B	OPTION C	OPTION D
data structure is a.......representation of	logical	physical	numerical	statistical
int *p declaration of	real no.	pointer	array	structure
int Arr[] bracket is used for	size	Subscript	memory	index
big O notation is used for	upper bound	lower bound	least	none of these
array index start for.......	0	1	-1	2

REFERENCES

❑ https://www.programiz.com/dsa/linked-list

❑ https://miro.medium.com/max/3572/1*Lnb0IARMGORn_c-gYf-24g.png

❑ https://www.javatpoint.com/singly-linked-list

❑ https://www.tutorialspoint.com/data_structures_algorithms/linked_list_algorithms.htm