

BHUSHITH GAGAN

18m18cs024

23/09/2020

BATCH: A2

ADS LAB-2

XOR DOUBLY LINKED LIST:

```
Node* XOR (Node* a, Node* b) {  
    return (Node*) ((uintptr_t)(a) ^ (uintptr_t)(b));  
}
```

```
void InsertBeg (Node* *head, int data) {  
    Node* new-node = new Node();  
    new-node->data = data;  
    new-node->npx = *head;  
    if (*head != NULL) (*head->npx)  
        XOR (new-node, (*head->npx));  
    *head = new-node;  
}
```

```
void InsertEnd (Node* *head, int data) {  
    Node* new-node = new Node();  
    new-node->data = data;  
    if (*head == NULL) {  
        new-node->npx = *head;  
        *head = new-node;  
    }  
    else {  
        Node* curr = *head;  
        Node* prev = NULL;  
        Node* next;
```

RHUSHI GAGAN

1BM18CS014

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```
while (xor(prev, curr->next) != NULL) {
```

```
    next = xor(prev, curr->next);
```

```
    prev = curr;
```

```
    curr = next;
```

```
}
```

```
new_node->next = curr;
```

```
curr->next = xor(prev, new_node);
```

```
}
```

```
}
```