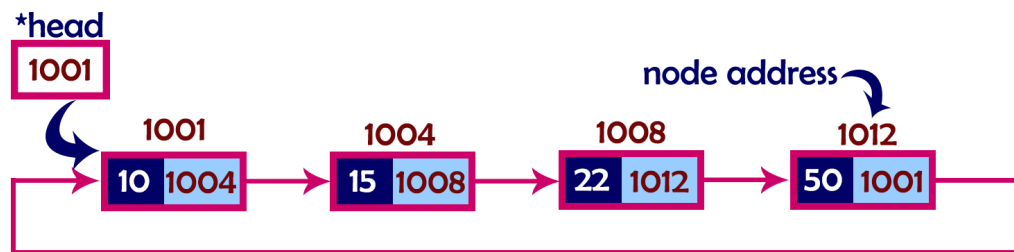


## QUESTION 1

While Traversing a single-circular linked list, when the traversing element/variable reaches the value of the pointer of the head node then it establishes that the traversing element/variable has reached the first element.



```
#include <iostream>

using namespace std;

// create a data structure for linked list

class node{
    public:
    int data;
    node* next;
    node(int val){
        data=val;
        next=NULL;
    }
}
```

```
};
```

```
// insertion function for CLL at end
```

```
void insert(node* &head,int val){  
    node* temp=new node(val);  
    node* curr=head;  
    if(head==NULL){  
        head=temp;  
        temp->next=head;  
        return;  
    }  
    while(curr->next!=head){  
        curr=curr->next;  
    }  
    curr->next=temp;  
    temp->next=head;  
}
```

```
// traversal of CLL
```

```
void printing(node* head){  
    if(head==NULL){  
        cout<<"empty list";  
        return;  
    }  
    node* curr=head;  
    do{
```

```

        cout<<curr->data<<" ";

        curr=curr->next;

    }while(curr!=head); // this is the condition where we reach the head again
}

int main()
{
    node* head=NULL;

    insert(head,3);

    insert(head,4);

    insert(head,5);

    insert(head,6);

    insert(head,7);

    printing(head);

    return 0;
}

```

---

## QUESTION 2

Circular linked lists are used in—————>

- 1) Round Robin Scheduling.
- 2) to keep track of the turn in a multi-player game.
- 3) to implement the undo function.
- 4) to repeat the songs in a playlist .
- 5) Circular doubly linked lists can be used to implement rewind and forward functions in a playlist, searching in a list etc.