**Practical No.7**

1) Implement a Circular Single Linked List (CSLL) and perform the operations: Create, Traverse, Insert\_Beg, Insert\_End, Delete\_beg, Delete\_end using Menu Driver Program.

#include <stdio.h> #include <stdlib.h> struct CLL{ int data; struct CLL \*next;

};

struct CLL \*head=NULL;

void insertbeg(){

struct CLL \*new;

new=(struct CLL\*)malloc(sizeof(struct CLL)); printf("Enter the value :"); scanf("%d",&new->data); if(head==NULL){ new->next=new; head=new;

return;

}

struct CLL \*temp=head; while(temp->next!=head){ temp=temp->next;

}

new->next=head; temp->next=new; head=new;

}

void insertend(){ struct CLL \*new;

new=(struct CLL\*)malloc(sizeof(struct CLL)); printf("Enter the value :"); scanf("%d",&new->data); if(head==NULL){ new->next=new; head=new;

return;

}

struct CLL \*temp=head; while(temp->next!=head){ temp=temp->next;

}

new->next=temp->next; temp->next=new;

}

void deleteend(){ if(head==NULL){

printf("List is empty...."); return;

}

struct CLL \*temp=head; while(temp->next->next!=head){ temp=temp->next;

}

temp->next=head;

}

void deletebeg(){

if(head==NULL){

printf("List is empty...."); return;

}

struct CLL \*temp=head; while(temp->next!=head){ temp=temp->next;

}

head=head->next; temp->next=head;

}

void display(){ printf("Printing the nodes of linked list ...\n");

struct CLL\* temp=head; do{ printf("%d ->",temp->data); temp=temp->next;

}while(temp!=head);

}

int main()

{

int ch;

while(1){

printf("\n1.Insert at begin\n2.Insert at end\n3.Delete at begin\n4.Delete at

end\n5.Display\n"); printf("Enter your choice: "); scanf("%d",&ch); switch(ch)

{

case 1:insertbeg(); break; case 2:insertend(); break; case 3:deletebeg(); break; case 4:deleteend(); break; case 5:display(); break; default:printf("Invalid choice"); break;

}

}

return 0;

}

● Output :-



