

## Circular Single Linked List

```
#include<stdio.h>
#include<conio.h>

struct circular
{
    int data;
    struct circular *next;
};

struct circular *temp;
struct circular *head;
struct circular *p;
struct circular *mid;
struct circular *move;

int cnt=0;

void create(void);
void insert(void);
void display(void);
void del(void);

void main()
{
    int ch=0;
    clrscr();
    while(ch!=5)
    {
        printf("\n1.CREATE");
        printf("\n2.INSERT");
        printf("\n3.DELETE");
        printf("\n4.DISPLAY");
        printf("\n5.EXIT");
        scanf("%d",&ch);
    }
}
```

```

    if(ch==1)
    {
        create();
        cnt++;
        cnt++;
    }

    if(ch==2)
    {
        insert();
        cnt++;
    }
    if(ch==3)
    {
        del();
        cnt--;
    }

    if(ch==4)
    {
        display();
    }

    if(ch==5)
    {
        break;
    }
}
getch();
}

void create()
{
    head=(struct circular *)malloc(sizeof(struct circular));
    head->next=head;
    printf("ENTER THE DATA");
    scanf("%d",&head->data);
    temp=head;
}

```

```

temp->next=(struct circular *)malloc(sizeof(struct circular));
temp=temp->next;
temp->next=head;
printf("ENTER THE DATA");
scanf("%d",&temp-> data);
}

```

```

void insert()

```

```

{
    int add,t;

    printf("\n\t ENTER ANY NUMBER BETWEEN 1 AND %d",cnt);
    scanf("%d",&add);
    p=head;
    t=1;
    while(t<add)
    {
        p=p->next;
        t++;
    }
    printf("%d",p-> data);
    clrscr();
    mid=(struct circular *)malloc(sizeof(struct circular));
    printf("ENTER THE DATA");
    scanf("%d",&mid-> data);
    mid->next=p->next;
    p->next=mid;
}

```

```

void display()

```

```

{
    p=head;
    printf("%d-->",p-> data);
    p=p->next;
    while(p!=head)
    {
        printf("%d-->",p-> data);
        p=p->next;
    }
}

```

```
}  
}
```

```
void del(void)
```

```
{
```

```
    int add,t;
```

```
    printf("\n\t ENTER ANY NUMBER BETWEEN 1 AND %d",cnt);
```

```
    scanf("%d",&add);
```

```
    p=head;
```

```
    t=1;
```

```
    while(t<add-1)
```

```
    {
```

```
        p=p->next;
```

```
        t++;
```

```
    }
```

```
    printf("%d",p-> data);
```

```
    clrscr();
```

```
    mid=p->next;
```

```
    p->next=mid->next;
```

```
}
```