

```

else {
    printf("%d");
}
}

```

August - 7

1) WAD implementing insert, delete & display operation of Circular queue.

```

#include <stdio.h>
#define MAX 5
int queue_arr[MAX];
int front = 0;
int rear = -1;
int count = 0;
int insert(int item)
{
    if (count == MAX)
    {
        printf("Overflow");
        return;
    }
    else {
        rear = (rear + 1) % MAX;
        queue_arr[rear] = item;
    }
}

```

```

count = count + 1;
return; } }
void deletion()
{

```

```

    if (count == 0)
    {
        printf("Queue Underflow");
        return;
    }
    else

```

```

    {
        printf("Element deleted from queue is: %d\n",
               queue_arr[front]);
    }

```

```

    front = (front + 1) % MAX;
    count = count - 1;
} }

```

```

void display()
{

```

```

    int i, j;
    if (count == 0)
    {
        printf("CQ is empty");
    }
    else {

```

```

        printf("Elements in the circular queue are: ");
        j = front;
        for (i = 0; i < count; i++)
        {
            printf("%d ", queue_arr[j]);
        }
    }
}

```


$J = (J + 1) \% N \times A \times$

} } }

ent main()

{
ent choice, item;

printf("CIRCULAR QUEUE");

do {

printf("1. Insertion");

printf("2. Deletion");

printf("3. Display");

printf("4. Quit");

~~Switch~~ switch (choice)

{

case 1: printf("Enter the element for insertion");
scanf("%d", &item);

insert(item);

break;

case 2: deletion();

break;

case 3: display();

break;

case 4: break;

default: printf("Wrong");

} }


```
while (choice != 4) ;  
return 0 ;
```