INPUT:

```cpp
#include<iostream>
#define size 5
using namespace std;

int front=-1;
int rear=-1;
string cq[size];

void Enqueue(string m)
{
                if(front==-1)
                { front=0;
                rear=(rear+1)%size;
                cq[rear]=m;
                cout<<"\nOrder taken succesfully!";
                }
                else
                {
                rear=(rear+1)%size;
                cq[rear]=m;
                cout<<"\nOrder taken succesfully!";
                }
}

string Dequeue()
{
        if(front==-1)
        {
                cout<<"\nNo orders in queue";
                return("Fail");
        }
        else
        {
                string temp=cq[front];
                if(front==rear)
                        front=rear=-1;
                else
                        front=(front+1)%size;
                return temp;
        }
}

void display()
{
        if(front==-1)
        {
                cout<<"\nNo orders in queue";
        }
        else
        {
                cout<<"\nPending Orders:";
                int i=front;
                while(i!=rear)
                {
```

```cpp
                    cout<<"\n\t"<<cq[i];
                i=(i+1)%size;
            }
            cout<<"\n\t"<<cq[i];
        }
}

int main()
{
        int ch;
        string t;
        while(true)
        {
        cout<<"\n\n--------------Menu----------------";
        cout<<"\n\t1. Order a Pizza";
        cout<<"\n\t2. Display Pending orders";
        cout<<"\n\t3. Pay & Deliver Pizza";
        cout<<"\n\t4. Exit";
        cout<<"\nEnter your choice: ";
        cin>>ch;
        switch(ch)
        {
                case 1: if(((rear==size-1)&&(front==0)) || (front==(rear+1)%size))
                                        cout<<"\nSorry!\nMaximum orders reached";
                            else
                            {
                                    cout<<"\nPizza menu";
                                    cout<<"\n\tA. Paneer Pizza";
                                    cout<<"\n\tB. Cheese Pizza";
                                    cout<<"\n\tC. Pineapple Pizza";
                                cout<<"\n\tD. Peri Peri Pizza";
                                cout<<"\n\tE. Farm Pizza";
                                    cout<<"\nEnter the index char of pizza to order:
";
                                    cin>>t;
                                    Enqueue(t);
                            }
                            break;
                case 2: display();
                            break;
                case 3: t=Dequeue();
                                if(t!="Fail")
                                    cout<<"Pizza "<<t<<" was delivered!";
                            break;
        case 4: return 0;
        default: cout<<"\nWrong Choice, Try again....";
                            break;
        }
        }
}
```

OUTPUT:
--------------Menu-----------------
    1. Order a Pizza
    2. Display Pending orders

```
        3. Pay & Deliver Pizza
        4. Exit
Enter your choice: 1

Pizza menu
        A. Paneer Pizza
        B. Cheese Pizza
        C. Pineapple Pizza
        D. Peri Peri Pizza
        E. Farm Pizza
Enter the index char of pizza to order: A

Order taken succesfully!

----------------Menu-----------------
        1. Order a Pizza
        2. Display Pending orders
        3. Pay & Deliver Pizza
        4. Exit
Enter your choice: 1

Pizza menu
        A. Paneer Pizza
        B. Cheese Pizza
        C. Pineapple Pizza
        D. Peri Peri Pizza
        E. Farm Pizza
Enter the index char of pizza to order: B

Order taken succesfully!

----------------Menu-----------------
        1. Order a Pizza
        2. Display Pending orders
        3. Pay & Deliver Pizza
        4. Exit
Enter your choice: 1

Pizza menu
        A. Paneer Pizza
        B. Cheese Pizza
        C. Pineapple Pizza
        D. Peri Peri Pizza
        E. Farm Pizza
Enter the index char of pizza to order: C

Order taken succesfully!

----------------Menu-----------------
        1. Order a Pizza
        2. Display Pending orders
        3. Pay & Deliver Pizza
        4. Exit
Enter your choice: 3
Pizza A was delivered!
```

```
---------------Menu----------------
     1. Order a Pizza
     2. Display Pending orders
     3. Pay & Deliver Pizza
     4. Exit
Enter your choice: 2

Pending Orders:
     B
     C

---------------Menu----------------
     1. Order a Pizza
     2. Display Pending orders
     3. Pay & Deliver Pizza
     4. Exit
Enter your choice: 1

Pizza menu
     A. Paneer Pizza
     B. Cheese Pizza
     C. Pineapple Pizza
     D. Peri Peri Pizza
     E. Farm Pizza
Enter the index char of pizza to order: A

Order taken succesfully!

---------------Menu----------------
     1. Order a Pizza
     2. Display Pending orders
     3. Pay & Deliver Pizza
     4. Exit
Enter your choice: 3
Pizza B was delivered!

---------------Menu----------------
     1. Order a Pizza
     2. Display Pending orders
     3. Pay & Deliver Pizza
     4. Exit
Enter your choice: 2

Pending Orders:
     C
     A

---------------Menu----------------
     1. Order a Pizza
     2. Display Pending orders
     3. Pay & Deliver Pizza
     4. Exit
Enter your choice: 4
[Program finished]
```