

//pizza

```
#include<iostream>
```

```
#include<cstdlib>
```

```
using namespace std;
```

```
class pizza
```

```
{
```

```
    int front,rear,q[5];
```

```
    public:
```

```
    pizza()
```

```
    {
```

```
        front=-1;
```

```
        rear=-1;
```

```
    }
```

```
    int isfull()
```

```
    {
```

```
        if((front==0&&rear==4) || front==rear+1)
```

```
        {
```

```
            return 1;
```

```
        }
```

```
    else
```

```
{
    return 0;
}

int isempty()
{
    if(front==-1&&rear==-1)
    {
        return 1;
    }
    else
    {
        return 0;
    }
}

void add()
{
    if(isfull()==0)
    {
        cout<<"\n Enter the Pizza ID: ";
        if(front==-1&&rear==-1)
        {
```

```
front=0;
rear=0;
cin>>q[rear];
}
else
{
rear=(rear+1)%5;
cin>>q[rear];
}
char c;
cout<<" Do you want to add another order ? ";
cin>>c;
if(c=='y' || c=='Y')
add();
}
else
{
cout<<"\n Orders are full ";
}

}

void serve()
```

```
{
if(isempty()==0)
{
if(front==rear)
{
cout<<"\n Order served is : "<<q[front];
front=-1;
rear=-1;
}
else
{
cout<<"\n Order served is : "<<q[front];
front=(front+1)%5;
}
}
else
{
cout<<"\n Orders are empty ";
}
}
void display()
{
```

```

if(isempty()==0)
{
for(int
i=front;i!=rear;i=(i+1)%5)
{
cout<<q[i]<<"";
}
cout<<q[rear];
}
else
{
cout<<"\n Orders are empty";
}
}

void check()
{
int ch;

cout<<"\n\n * * * * PIZZA PARLOUR * * * * \n\n";

cout<<"\n 1. Add a Pizza \n 2. Display the Orders \n 3. Serve
a pizza \n 4. Exit \n Enter your choice : ";

cin>>ch;

switch(ch)

```

```
{  
    case 1:  
        add();  
        break;  
  
    case 2:  
  
        display();  
        break;  
  
    case 3:  
  
        serve();  
        break;  
  
    case 4:  
  
        exit(0);  
  
    default:  
        cout<<"Invalid choice ";
```

```
check();  
}  
char ch1;  
cout<<"\n Do you want to continue? ";  
cin>>ch1;  
if(ch1=='y' || ch1=='Y')  
check();  
}  
};  
int main()  
{  
    pizza p1;  
    p1.check();  
    return 0;  
}
```