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#include<iostream>

#include<windows.h>

using namespace std;

const int MAX=5;

class PizzaParlour
{
int front,rear;
int orders[MAX];
public:
PizzaParlour()
{
front=rear=-1;
}
bool addOrder(int data);
void serveOrder();
void display();
};

bool PizzaParlour::addOrder(int id){
if(rear==MAX-1)
{
front=rear=0;
orders[rear]=id;
return true;
}
else
{
int pos=(rear+1)%MAX;
if(pos==front)
{
cout<<"\nCafe is Full.Please wait.\n";
return false;
}
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}
else
{
rear=pos;
orders[rear]=id;
return true;
}
}
}

void PizzaParlour::serveOrder()
{
if(front==-1)
{
cout<<"\n No Orders in Cafe.[Cafe is Empty]\n";
return;
}
else
{
cout<<"\n Order No. "<<orders[front]<<" is processed.\n";
if(front==rear) //only one order
{
front=rear=-1;
}
else
{
front=(front+1)%MAX;
}
}
}

void PizzaParlour::display()
{

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int i=0;
if(front==-1)
{
cout<<"\nCafe is Empty.No orders.\n";
return;
}
else
{
cout<<"Order Id's: \n";
for(i=front;i!=rear;i=((i+1)%MAX))
{
cout<<orders[i]<<" ";
}
cout<<orders[rear];
}
}

void intro()
{ char name[50]={"\n UniversalCafe \n"};
for(int i=0;name[i]!='\0';i++)
{
Sleep(50);
cout<<name[i];
}
}

int main()
{
int ch,id=0;
PizzaParlour q;

do
{
cout<<"\n-----";

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intro();
cout<<"-----";
cout<<"\n****Menu****\n";
cout<<"1. Accept order\n";
cout<<"2. Serve order\n";
cout<<"3. Display orders\n";
cout<<"4. Exit";
cout<<"\nChoice: ";
cin>>ch;
switch(ch)
{
case 1:
id++;
if(q.addOrder(id))
{
cout<<"Thank you for order.Order id is : "<<id;
}
else
{
id--;
}
break;
case 2: q.serveOrder();
break;
case 3: q.display();
break;
}
}while(ch!=4);
cout<<"\nThank You.Keep Visiting.";
}

```