#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<<"\nEnterthePizzaID:";

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<<"\nOrdersarefull";

}

}

void serve()

{

if(isempty()==0)

{

if(front==rear)

{

cout<<"\nOrderservedis:"<<q[front];

front=-1;

rear=-1;

}

else

{

cout<<"\nOrderservedis:"<<q[front];

front=(front+1)%5;

}

}

else

{

cout<<"\nOrdersareempty";

}

}

void display()

{

if(isempty()==0)

{

for(int

i=front;i!=rear;i=(i+1)%5)

{

cout<<q[i]<<"<-";

}

cout<<q[rear];

}

else

{

cout<<"\nOrdersareempty";

}

}

void check()

{

int ch;

cout<<"\n\n\*\*\*\*PIZZAPARLOUR\*\*\*\*\n\n";

cout<<"\n1.AddaPizza\n2.DisplaytheOrders\n3.Serveapizza\n4.Exit\nEnteryourchoice:";

cin>>ch;

switch(ch)

{

case 1:

add();

break;

case 2:

display();

break;

case 3:

serve();

break;

case 4:

exit(0);

default:

cout<<"Invalidchoice";

check();

}

char ch1;

cout<<"\nDoyouwanttocontinue?";

cin>>ch1;

if(ch1=='y'||ch1=='Y')

check();

}

};

int main()

{

pizza p1;

p1.check();

return 0;

}