**Assignment No.11(Pizza order system).**

#include <iostream>

#include<string>

#define MAX 5

using namespace std;

class orders{

public:

int fronts,rear,que[MAX];

void initialise(){

fronts=-1;

rear=-1;

}

int isFull(){

if((rear+1)%MAX==fronts){

return 1;

}else{

return 0;

}

}

int isEmpty(){

if(rear==-1){

return 1;

}else{

return 0;

}

}

void inserts(){

int number;

cout<<endl<<"Enter order receipt number:";

cin>>number;

if(isEmpty()){

rear=fronts=0;

que[rear]=number;

}else{

rear=(rear+1)%MAX;

que[rear]=number;

}

}

void cancel(){

if(fronts==rear){

int x=que[rear];

fronts=rear=-1;

cout<<endl<<"cancelled order number:"<<x;

}else{

int x=que[fronts];

fronts=(fronts+1)%MAX;

cout<<endl<<"cancelled order number:"<<x;

}

}

void display(){

int i=0;

i=fronts;

while(i!=rear){

cout<<que[i]<<"\t";

i=(i+1)%MAX;

}

cout<<que[i];

}

};

int main()

{

orders a1;

int ch;

a1.initialise();

do{

cout<<endl<<"\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*PIZZA ORDERING SYSTEM\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*";

cout<<endl<<"1.Accept order....\n2.Display order...\n3.cancel order....\n4.Exit";

cout<<endl<<"Enter your choice:";

cin>>ch;

switch(ch){

case 1:

if(a1.isFull()){

cout<<endl<<"Order queue is full!!!!!..can't accept orders...";

}else{

a1.inserts();

}

break;

case 2:

if(a1.isEmpty()){

cout<<endl<<"Order queue doesn't contain any orders...";

}else{

a1.display();

}

break;

case 3:

if(a1.isEmpty()){

cout<<endl<<"Order queue doesn't contain any orders...";

}else{

a1.cancel();

}

break;

}

}while(ch!=4);

return 0;

}