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Q batch Comp-2

Group E-32

Pizza parlor accepting maximum M orders. Orders are served in first come first served

basis. Order once placed cannot be cancelled. Write C++ program to simulate the system

using circular queue using array.

#include <iostream>

using namespace std;

#define size 5

class pizza

{

int porder[size];

int front, rear;

public:

pizza()

{

front = rear = -1;

}

int qfull()

{

if (front == (rear + 1) % size)

return 1;

else

return 0;

}

int qempty()

{

if (front == -1)

return 1;

else

return 0;

}

void accept\_order(int item)

{

if (qfull())

cout << "\nVery Sorry !!!! No more orders....\n";

else

{

if (front == -1)

{

front = rear = 0;

}

else

{

rear = (rear + 1) % size;

}

porder[rear] = item;

}

}

void make\_payment()

{

int item;

char ans;

int ct=1;

if (qempty())

cout << "\nSorry !!! order is not there...\n";

else

{

int temp = front,n;

cout << "\nPending Order as follows..\n";

while (temp != rear){

ct++;

temp = (temp + 1) % size;

}

cout<<"There are "<<ct<< " orders in pizza parlor."<<endl;

cout << "\nHow many Pizza ?";

cin >> n;

cout << "\nDeliverd orders as follows...\n";

for (int i = 0; i < n; i++)

{

item = porder[front];

if (front == rear)

{

front = rear = -1;

}

else

{

front = (front + 1) % size;

}

cout << "\t" << item;

}

cout << "\nTotal amount to pay : " << n \* 100;

cout << "\nThank you visit Again....\n";

}

}

void order\_in\_queue()

{

int temp;

if (qempty())

{

cout << "\nSorry !! There is no pending order...\n";

}

else

{

temp = front;

cout << "\nPending Order as follows..\n";

while (temp != rear){

cout << "\t" << porder[temp];

temp = (temp + 1) % size;

}

cout << "\t" << porder[temp];

}

}

};

int main(){

pizza p1;

int ch, k;

do{

cout << "\n\t\*\*\*\*\* Welcome To Pizza Parlor \*\*\*\*\*\*\*\n";

cout << "\n1.Accept order\n2.Make\_payment\n3.Pending Orders\n4. Exit\nEnter u r choice:";

cin >> ch;

switch (ch){

case 1:

cout << "\nWhich Pizza would do u like to have today\n";

cout << "\n1.Veg Soya Pizza\n2.Veg butter Pizza\n3.Egg\_Pizza";

cout << "\nPlease enter your order: ";

cin >> k;

p1.accept\_order(k);

break;

case 2:

p1.make\_payment();

break;

case 3:

cout << "\n Following orders are in queue to deliver....as follows..\n";

p1.order\_in\_queue();

break;

}

} while (ch != 4);

return 0;

}

OUTPUT

\*\*\*\*\* Welcome To Pizza Parlor \*\*\*\*\*\*\*

1.Accept order

2.Make\_payment

3.Pending Orders

4. Exit

Enter u r choice:1

Which Pizza would do u like to have today

1.Veg Soya Pizza

2.Veg butter Pizza

3.Egg\_Pizza

Please enter your order: 2

\*\*\*\*\* Welcome To Pizza Parlor \*\*\*\*\*\*\*

1.Accept order

2.Make\_payment

3.Pending Orders

4. Exit

Enter u r choice:2

Pending Order as follows..

There are 1 orders in pizza parlor.

How many Pizza ?2

Deliverd orders as follows...

2 2

Total amount to pay : 200

Thank you visit Again....

\*\*\*\*\* Welcome To Pizza Parlor \*\*\*\*\*\*\*

1.Accept order

2.Make\_payment

3.Pending Orders

4. Exit

Enter u r choice:3

Following orders are in queue to deliver....as follows..

Sorry !! There is no pending order...

\*\*\*\*\* Welcome To Pizza Parlor \*\*\*\*\*\*\*

1.Accept order

2.Make\_payment

3.Pending Orders

4. Exit

Enter u r choice: