**PRACTICAL NO:13**

**INPUT**:

#include <iostream>

using namespace std;

#define size 5

class pizza {

int porder[size];

int front, rear;

int count = 0;

public:

pizza() {

front = rear = -1;

}

int qfull() {

if ((front == 0 && rear == (size - 1)) || (front == (rear + 1) % size))

return 1;

else

return 0;

}

int qempty() {

if (front == -1)

return 1;

else

return 0;

}

void accept\_order(int);

void make\_payment(int);

void order\_in\_queue();};

void pizza::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;

count++;

} }

void pizza::make\_payment(int n) {

int item;

if (qempty())

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

else if (n > count){

cout << "\nSorry !!! You are trying to pay for more pizzas than available...\n";

cout<<"there are only"<<" "<<count<<"pizza!"<<endl;}

else {

cout << "\nDelivered 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; }

count -= n;

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

cout << "\nThank you, visit again....\n";

}

}

void pizza::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, n;

do {

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

cout << "\n1. Accept order\n2. Make payment\n3. Pending Orders\nEnter your choice: ";

cin >> ch;

switch (ch) {

case 1:

cout << "\nWhich Pizza do you like most....\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:

cout << "\nHow many Pizzas? ";

cin >> n;

p1.make\_payment(n);

break;

case 3:

cout << "\nFollowing 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

Enter your choice: 1

Which Pizza do you like most....

1. Veg Soya Pizza

2. Veg Butter Pizza

3. Egg Pizza

Please enter your order: 1

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

1. Accept order

2. Make payment

3. Pending Orders

Enter your choice: 1

Which Pizza do you like most....

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

Enter your choice: 3

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

Pending Order as follows..

1 2

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

1. Accept order

2. Make payment

3. Pending Orders

Enter your choice: 2

How many Pizzas? 3

Sorry !!! You are trying to pay for more pizzas than available...

there are only 2 pizza!

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

1. Accept order

2. Make payment

3. Pending Orders

Enter your choice: 2

How many Pizzas? 2

Delivered orders as follows...

1 2

Total amount to pay : 200

Thank you, visit again....