**PROGRAM**:

#include<iostream>

#define size 10

using namespace std;

static int item;

class Pizza

{

int q[10],front,rear,count,i;

public:

Pizza();

int o\_full();

int o\_empty();

void add();

void delete\_();

void display();

};

Pizza::Pizza()

{

front=-1;

rear=-1;

i=0;

}

int Pizza::o\_full()

{

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

return 1;

else

return 0;

}

int Pizza::o\_empty()

{

if(front==-1)

return 1;

else

return 0;

}

void Pizza::add()

{

int id;

if(o\_full())

cout<<"\nMaximum orders reached";

else

{

if(o\_empty())

front=rear=0;

else

rear=(rear+1)%size;

q[rear]=i;

i++;

cout<<"\nenter the order ID:\n";

cin>>id;

cout<<"\nYour order is placed";

cout<<"\nyour order number is "<<i-1;

}

}

void Pizza::delete\_()

{

if(o\_empty())

cout<<"\nCurrently No Orders Are Placed";

else

{

i=q[front];

if(front==rear)

front=rear=-1;

else

front=(front+1)%size;

cout<<"\n Bon Appetit!!! ";

}

}

void Pizza::display()

{

if(o\_empty())

{

cout<<"\nCurrently No Orders Are Placed";

}

else

{

cout<<"\nOrders : ";

i=front;

while(i!=rear)

{

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

i=(i+1)%size;

}

cout<<q[i];

}

}

int main()

{

int choice;

char ch;

Pizza obj;

cout<<"\n\n---------------WELCOME TO PIZZA PARLOUR----------------\n\n\n";

cout<<"\n\n----------MENU---------- \n\n";

cout<<"\n\tID\t\t\tPIZZA NAME\n\n";

cout<<"\n\t1\t\t\tVEG.PIZZA";

cout<<"\n\t2\t\t\tVEG.PANEER PIZZA";

cout<<"\n\t3\t\t\tPEPPY PANEER PIZZA";

cout<<"\n\t4\t\t\tFARMHOUSE PIZZA";

cout<<"\n\t5\t\t\tSMOKIES FIVE PIZZA";

cout<<"\n\t6\t\t\tCOUNTRY SPECIAL PIZZA";

cout<<"\n\t7\t\t\tHAPPY HAPPY PIZZA\n\n";

cout<<"\nmaximum number of orders that can be placed are "<<size<<endl<<endl;

do

{

cout<<"Enter your choice \n1.Place the Order \n2.Serve the Order\n3.Display the Orders \n";

cin>>choice;

switch(choice)

{

case 1: item=0;

obj.add();

break;

case 2: obj.delete\_();

break;

case 3: obj.display();

break;

default:

cout<<"\nWrong Choice";

break;

}

cout<<"\n\nDo you want to Continue...?(y/n) ";

cin>>ch;

}while(ch=='y'||ch=='Y');

return 0;

}

**OUTPUT:**

---------------WELCOME TO PIZZA PARLOUR----------------

----------MENU----------

ID PIZZA NAME

1 VEG.PIZZA

2 VEG.PANEER PIZZA

3 PEPPY PANEER PIZZA

4 FARMHOUSE PIZZA

5 SMOKIES FIVE PIZZA

6 COUNTRY SPECIAL PIZZA

7 HAPPY HAPPY PIZZA

maximum number of orders that can be placed are 10

Enter your choice

1.Place the Order

2.Serve the Order

3.Display the Orders

1

enter the order ID:

6

Your order is placed

your order number is 0

Do you want to Continue...?(y/n) y

Enter your choice

1.Place the Order

2.Serve the Order

3.Display the Orders

1

enter the order ID:

4

Your order is placed

your order number is 1

Do you want to Continue...?(y/n) y

Enter your choice

1.Place the Order

2.Serve the Order

3.Display the Orders

1

enter the order ID:

3

Your order is placed

your order number is 2

Do you want to Continue...?(y/n) y

Enter your choice

1.Place the Order

2.Serve the Order

3.Display the Orders

2

Bon Appetit!!!

Do you want to Continue...?(y/n) y

Enter your choice

1.Place the Order

2.Serve the Order

3.Display the Orders

3

Orders : 1 2

Do you want to Continue...?(y/n) y

Enter your choice

1.Place the Order

2.Serve the Order

3.Display the Orders

2

Bon Appetit!!!

Do you want to Continue...?(y/n) y

Enter your choice

1.Place the Order

2.Serve the Order

3.Display the Orders

3

Orders : 2

Do you want to Continue...?(y/n) y

Enter your choice

1.Place the Order

2.Serve the Order

3.Display the Orders

2

Bon Appetit!!!

Do you want to Continue...?(y/n) y

Enter your choice

1.Place the Order

2.Serve the Order

3.Display the Orders

3

Currently No Orders Are Placed

Do you want to Continue...?(y/n) n