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Course - BSC.IT A

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Question 1

```
#include <stdio.h>
const int MXX = 10;
int ch, id = 0, front = -1, rear = 0,
orders[MXX];

int addOrders(int data)
{
    if (rear == -1)
    {
        front = rear = 0;
        orders[rear] = id;
        return 1;
    }
    else
    {
        int pos = (rear + 1) % MXX;
        if (pos == front)
        {
            printf("\n Cafe is full. Please wait.\n");
            return 0;
        }
        else
        {
            rear = pos;
            orders[rear] = id;
            return 1;
        }
    }
}
```

Nihazika

```
void serveOrder()
```

```
{
    if(front == -1)
    {
        printf("\n No Order in cafe (cafe is Empty)\n");
        return;
    }
    else
    {
        printf("\n Order No.");
        printf("%d", orders[front]);
        printf(" is processed.\n");
        if(front == rear)
        {
            front = rear = -1;
        }
        else
        {
            front = (front + 1) % 10;
        }
    }
}
```

```
void display()
```

```
{
    int i = 0;
    if(front == -1)
    {
        printf("\n cafe is Empty\n");
        return;
    }
    else
    {
        printf("Order Id's: \n");
        for(i = front; i != rear; i = (i + 1) % 10)
        {
            printf("%d", orders[i]);
            printf("\n");
        }
        printf("%d", orders[rear]);
    }
}
```

Prithvish