

**PROGRAMMING FUNDAMENTAL  
(PROJECT SUMITED.)**

**CS241149  
ROHIT RAJ.**

**RESTAURANT MANAGEMENT SYSTEM.**

**GROUP LEADER: ROHIT RAJ:**

**TEAM MEMBER: ARYAN KUMAR:**

**(CODE.C):**

```
#include <stdio.h>
```

```
#include <time.h>
```

```
#include <string.h>
```

```
#define CST_RATE 0.10
```

```
int tokenNumber = 1;
```

```
void displayHeading() {
```

```
    printf("\n*****\n");
```

```
    printf("                                *\n");
```

```
    printf("                WELCOME TO YOUR DREAM RESTAURANT    *\n");
```

```
    printf("                                *\n");
```

```
    printf("*****\n");
```

```
    printf("                                *\n");
```

```
    printf("                Where Comfort Meets Elegance        *\n");
```

```
    printf("                                *\n");
```

```
    printf("                Your Sanctuary of Peace and Happiness    *\n");
```

```
    printf("                                *\n");
```

```
    printf("*****\n");
```

```
}
```

```
// Display the menu for different categories
```

```
void displayMenu() {
```

```
printf("\n--- Restaurant Menu ---\n");  
printf("1. Starters:\n");  
printf("  a. Soup          - Rs: 80\n");  
printf("  b. Spring Rolls    - Rs: 250\n");  
printf("  c. Nachos          - Rs: 250\n");  
printf("  d. Chicken Wings   - Rs: 750\n");  
printf("  e. French Fries    - Rs: 120\n");  
printf("  f. Onion Rings     - Rs: 100\n");  
printf("  g. Finger Fish     - Rs: 1036\n");  
printf("2. Main Course:\n");  
printf("  a. Pizza           - Rs: 900\n");  
printf("  b. Pasta           - Rs: 350\n");  
printf("  c. Burger          - Rs: 400\n");  
printf("  d. Chicken Roll    - Rs: 250\n");  
printf("  e. Chicken cheese Roll - Rs: 280\n");  
printf("  f. Resmi Kabab Roll - Rs: 240\n");  
printf("3. Desserts:\n");  
printf("  a. Ice Cream       - Rs: 80\n");  
printf("  b. Cake            - Rs: 250\n");  
printf("  c. Chocolate lava  - Rs: 230\n");  
printf("  d. Cake Slice      - Rs: 360\n");  
printf("  e. Fudge Browine   - Rs: 180\n");  
printf("  f. Whole Cake      - Rs: 2030\n");  
printf("4. Cold Beverages:\n");  
printf("  a. Mineral water   - Rs: 60\n");
```

```
printf("  b. Slush Drink      - Rs: 170\n");
printf("  c. Sting           - Rs: 80\n");
printf("  d. Pupsi             - Rs: 70\n");
printf("  e. Slice              - Rs: 70\n");
printf("  f. Mint Lemonada      - Rs: 150\n");
printf("  g. Next               - Rs: 130\n");

}
```

```
void printDateTime() {
    time_t now;
    time(&now);
    printf("\n--- Date & Time: %s", ctime(&now));
}
```

```
void takeOrder() {
    char userName[50];
    int category, quantity, tableNumber;
    char item, anotherOrder, orderType;
    float total = 0, subTotal = 0, cst, grandTotal;
    int paymentMethod;

    // Ask for the user's name
    printf("\nEnter your name: ");
    scanf("%[^\\n]%*c", userName);
}
```

```
// Ask for the order type: Dining or Home Delivery  
printf("\nChoose Order Type:\n");  
printf("1. Dining\n");  
printf("2. Home Delivery\n");  
printf("Enter your choice: ");  
scanf(" %c", &orderType);  
  
if (orderType == '1') {  
    printf("\nEnter your table number: ");  
    scanf("%d", &tableNumber);  
    printf("Your table number is: %d\n", tableNumber);  
} else if (orderType == '2') {  
    printf("Home delivery selected.\n");  
} else {  
    printf("Invalid order type. Exiting order process.\n");  
    return; // Exit the function  
}  
  
printf("Your order token number is: %d\n", tokenNumber);  
  
printf("\nSelect Payment Method:\n");  
printf("1. Cash\n");  
printf("2. Credit/Debit Card\n");  
printf("3. Digital Wallet\n");
```

```
printf("Enter your choice: ");  
scanf("%d", &paymentMethod);  
  
do {  
  
    printf("\nEnter the menu category (1-4): ");  
  
    scanf("%d", &category);  
  
    if (category < 1 || category > 4) {  
        printf("Invalid category! Please choose a valid category (1-  
3).\n");  
        break;  
    }  
  
    switch (category) {  
        case 1:  
            printf("Starters:\n");  
            printf("  a. Soup      - Rs: 80\n");  
            printf("  b. Spring Rolls - Rs: 250\n");  
            printf("  c. Nachos     - Rs: 250\n");  
            printf("  d. Chicken Wings- Rs: 750\n");  
            printf("  e. French Fries - Rs: 120\n");  
            printf("  f. Onion Rings - Rs: 100\n");  
            printf("  g. Finger Fish - Rs: 1036\n");  
            printf("Choose an item: ");  
            scanf(" %c", &item);
```

```
subTotal = 0;  
if (item == 'a') {  
    printf("Enter quantity: ");  
    scanf("%d", &quantity);  
    subTotal = quantity * 80;  
} else if (item == 'b') {  
    printf("Enter quantity: ");  
    scanf("%d", &quantity);  
    subTotal = quantity * 250;  
} else if (item == 'c') {  
    printf("Enter quantity: ");  
    scanf("%d", &quantity);  
    subTotal = quantity * 250;  
} else if (item == 'd') {  
    printf("Enter quantity: ");  
    scanf("%d", &quantity);  
    subTotal = quantity * 750;  
} else if (item == 'e') {  
    printf("Enter quantity: ");  
    scanf("%d", &quantity);  
    subTotal = quantity * 120;  
} else if (item == 'f') {  
    printf("Enter quantity: ");  
    scanf("%d", &quantity);  
    subTotal = quantity * 100;
```

```

} else if (item == 'g') {
    printf("Enter quantity: ");
    scanf("%d", &quantity);
    subTotal = quantity * 1036;
    }else {
    printf("Invalid choice for Starters.\n");
    continue;
}

printf("Subtotal: Rs: %.2f\n", subTotal);
break;

case 2:
    printf("2. Main Course:\n");
    printf("  a. Pizza          - Rs: 900\n");
    printf("  b. Pasta           - Rs: 350\n");
    printf("  c. Burger           - Rs: 400\n");
    printf("  d. Chicken Roll     - Rs: 250\n");
    printf("  e. Chicken cheese Roll - Rs: 280\n");
    printf("  f. Resmi Kabab Roll  - Rs: 240\n");

    printf("Choose an item:");
    scanf(" %c", &item);

    subTotal = 0; // Reset subtotal for each item selection

    if (item == 'a') {
        printf("Enter quantity: ");
        scanf("%d", &quantity);
        subTotal = quantity * 900;
    
```



```
} else if (item == 'b') {  
    printf("Enter quantity: ");  
    scanf("%d", &quantity);  
    subTotal = quantity * 350;  
} else if (item == 'c') {  
    printf("Enter quantity: ");  
    scanf("%d", &quantity);  
    subTotal = quantity * 400;  
} else if (item == 'd') {  
    printf("Enter quantity: ");  
    scanf("%d", &quantity);  
    subTotal = quantity * 250;  
} else if (item == 'e') {  
    printf("Enter quantity: ");  
    scanf("%d", &quantity);  
    subTotal = quantity * 280;  
} else if (item == 'f') {  
    printf("Enter quantity: ");  
    scanf("%d", &quantity);  
    subTotal = quantity * 240;  
} else {  
    printf("Invalid choice for Main Course.\n");  
    continue;  
}  
  
printf("Subtotal: Rs: %.2f\n", subTotal);
```

**break;**

**case 3:**

**printf("3. Desserts:\n");**

**printf(" a. Ice Cream - Rs: 80\n");**

**printf(" b. Cake - Rs: 250\n");**

**printf(" c. Chocolate lava - Rs: 230\n");**

**printf(" d. Cake Slice - Rs: 360\n");**

**printf(" e. Fudge Browine - Rs: 180\n");**

**printf(" f. Whole Cake - Rs: 2030\n");**

**printf("Choose an item: ");**

**scanf(" %c", &item);**

**subTotal = 0; // Reset subtotal for each item selection**

**if (item == 'a') {**

**printf("Enter quantity: ");**

**scanf("%d", &quantity);**

**subTotal = quantity \* 80;**

**} else if (item == 'b') {**

**printf("Enter quantity: ");**

**scanf("%d", &quantity);**

**subTotal = quantity \* 250;**

**} else if (item == 'c') {**

**printf("Enter quantity: ");**

**scanf("%d", &quantity);**

**subTotal = quantity \* 230;**

**} else if (item == 'd') {**

```

printf("Enter quantity: ");
scanf("%d", &quantity);
subTotal = quantity * 360;
    } else if (item == 'e') {
printf("Enter quantity: ");
scanf("%d", &quantity);
subTotal = quantity * 180;
    } else if (item == 'f') {
printf("Enter quantity: ");
scanf("%d", &quantity);
subTotal = quantity * 2030;
} else {
printf("Invalid choice for Desserts.\n");
continue;
}
printf("Subtotal: Rs: %.2f\n", subTotal);
break;
case 4:
printf("4. Cold Beverages:\n");
    printf(" a. Mineral water    - Rs: 60\n");
    printf(" b. Slush Drink        - Rs: 170\n");
    printf(" c. Sting                - Rs: 80\n");
    printf(" d. Pupsi                - Rs: 70\n");
    printf(" e. Slice                - Rs: 70\n");
    printf(" f. Mint Lemonada        - Rs: 150\n");

```

**printf(" g. Next - Rs: 130\n");**

**printf("Choose an item: ");**

**scanf(" %c", &item);**

**subTotal = 0; // Reset subtotal for each item selection**

**if (item == 'a') {**

**printf("Enter quantity: ");**

**scanf("%d", &quantity);**

**subTotal = quantity \* 60;**

**} else if (item == 'b') {**

**printf("Enter quantity: ");**

**scanf("%d", &quantity);**

**subTotal = quantity \* 170;**

**} else if (item == 'c') {**

**printf("Enter quantity: ");**

**scanf("%d", &quantity);**

**subTotal = quantity \* 80;**

**} else if (item == 'd') {**

**printf("Enter quantity: ");**

**scanf("%d", &quantity);**

**subTotal = quantity \* 70;**

**} else if (item == 'e') {**

**printf("Enter quantity: ");**

**scanf("%d", &quantity);**

**subTotal = quantity \* 150;**

```
        } else if (item == 'f') {  
            printf("Enter quantity: ");  
            scanf("%d", &quantity);  
            subTotal = quantity * 130;  
        } else {  
            printf("Invalid choice for Cold Beverages.\n");  
            continue;  
        }  
        printf("Subtotal: Rs: %.2f\n", subTotal);  
        break;  
    }  
  
    total += subTotal;  
    printf("Do you want to place another order? (y/n): ");  
    scanf(" %c", &anotherOrder);  
} while (anotherOrder == 'y' || anotherOrder == 'Y');  
  
cst = total * CST_RATE;  
grandTotal = total + cst;  
  
// Display Final Bill  
printf("\n--- Final Bill for %s ---\n", userName);  
printf("Token Number: %d\n", tokenNumber);  
if (orderType == '1') {
```

```
        printf("Table Number: %d\n", tableNumber);
    } else {
        printf("Home Delivery\n");
    }

    printf("Total: Rs: %.2f\n", total);
    printf("CST (10%%): Rs: %.2f\n", cst);
    printf("Grand Total: Rs: %.2f\n", grandTotal);
    printf("Payment Method: ");
    switch (paymentMethod) {
        case 1:
            printf("Cash\n");
            break;
        case 2:
            printf("Credit/Debit Card\n");
            break;
        case 3:
            printf("Digital Wallet\n");
            break;
        default:
            printf("Unknown (Invalid Selection)\n");
    }

    printf("Thank you for dining with us, %s! Have a great day!\n",
userName);

    tokenNumber++;
```

```
}
```

```
int main() {
```

```
    int choice;
```

```
    do {
```

```
        displayHeading();
```

```
        printDateTime();
```

```
        printf("\n1. View Menu\n");
```

```
        printf("2. Place Order\n");
```

```
        printf("3. Exit\n");
```

```
        printf("Enter your choice: ");
```

```
        scanf("%d", &choice);
```

```
        switch (choice) {
```

```
            case 1:
```

```
                displayMenu();
```

```
                break;
```

```
            case 2:
```

```
                takeOrder();
```

```
                break;
```

```
            case 3:
```

```
                printf("Exiting the system. Thank you!\n");
```

```
                break;
```

```
            default:
```

```

        printf("Invalid choice! Please try again.\n");
    }
} while (choice != 3);

return 0;
}

```

### OUT PUT:

```

*****
*                                     *
*           WELCOME TO YOUR DREAM RESTAURANT           *
*                                     *
*****
*                                     *
*           Where Comfort Meets Elegance                *
*                                     *
*           Your Sanctuary of Peace and Happiness        *
*                                     *
*****

--- Date & Time: Sat Feb 01 15:00:04 2025

1. View Menu
2. Place Order
3. Exit
Enter your choice: _

```



## (SHOW MENU):

C:\Users\joel\Desktop\restaurant management system\project.exe

```
1. View Menu
2. Place Order
3. Exit
Enter your choice: 1

--- Restaurant Menu ---
1. Starters:
  a. Soup - Rs: 80
  b. Spring Rolls - Rs: 250
  c. Nachos - Rs: 250
  d. Chicken Wings - Rs: 750
  e. French Fries - Rs: 120
  f. Onion Rings - Rs: 100
  g. Finger Fish - Rs: 1036
2. Main Course:
  a. Pizza - Rs: 900
  b. Pasta - Rs: 350
  c. Burger - Rs: 400
  d. Chicken Roll - Rs: 250
  e. Chicken cheese Roll - Rs: 280
  f. Resmi Kabab Roll - Rs: 240
3. Desserts:
  a. Ice Cream - Rs: 80
  b. Cake - Rs: 250
  c. Chocolate lava - Rs: 230
  d. Cake Slice - Rs: 360
  e. Fudge Browine - Rs: 180
  f. Whole Cake - Rs: 2030
4. Cold Beverages:
  a. Mineral water - Rs: 60
  b. Slush Drink - Rs: 170
  c. Sting - Rs: 80
  d. Pupsi - Rs: 70
  e. Slice - Rs: 70
  f. Mint Lemonada - Rs: 150
  g. Next - Rs: 130
```

\*\*\*\*\*

## PLACE ORDER:

--- Date & Time: Sat Feb 01 15:00:53 2025

1. View Menu
2. Place Order
3. Exit

Enter your choice: 2

Enter your name: rohit raj

Choose Order Type:

1. Dining
2. Home Delivery

Enter your choice: 1

Enter your table number: 1

Your table number is: 1

Your order token number is: 1

Select Payment Method:

1. Cash
2. Credit/Debit Card
3. Digital Wallet

Enter your choice: 1

Enter the menu category (1-4): 1

Starters:

- |                   |         |          |
|-------------------|---------|----------|
| a. Soup           | -       | Rs: 80   |
| b. Spring Rolls   | -       | Rs: 250  |
| c. Nachos         | -       | Rs: 250  |
| d. Chicken Wings- | Rs: 750 |          |
| e. French Fries   | -       | Rs: 120  |
| f. Onion Rings    | -       | Rs: 100  |
| g. Finger Fish    | -       | Rs: 1036 |

Choose an item: a

Enter quantity: 2

Subtotal: Rs: 160.00

Do you want to place another order? (y/n): y

g. Finger Fish - Rs: 1036

Choose an item: a

Enter quantity: 2

Subtotal: Rs: 160.00

Do you want to place another order? (y/n): y

Enter the menu category (1-4): 2

2. Main Course:

- |                        |   |         |
|------------------------|---|---------|
| a. Pizza               | - | Rs: 900 |
| b. Pasta               | - | Rs: 350 |
| c. Burger              | - | Rs: 400 |
| d. Chicken Roll        | - | Rs: 250 |
| e. Chicken cheese Roll | - | Rs: 280 |
| f. Resmi Kabab Roll    | - | Rs: 240 |

Choose an item: b

Enter quantity: 1

Subtotal: Rs: 350.00

Do you want to place another order? (y/n): n

--- Final Bill for rohit raj ---

Token Number: 1

Table Number: 1

Total: Rs: 510.00

CST (10%): Rs: 51.00

Grand Total: Rs: 561.00

Payment Method: Cash

Thank you for dining with us, rohit raj! Have a great day!

## EXIT:

```
*****
*
*                               *
*      WELCOME TO YOUR DREAM RESTAURANT      *
*                               *
*****
*
*      Where Comfort Meets Elegance           *
*
*      Your Sanctuary of Peace and Happiness  *
*
*****

--- Date & Time: Sat Feb 01 15:04:17 2025

1. View Menu
2. Place Order
3. Exit
Enter your choice: 3
Exiting the system. Thank you!

-----
Process exited after 3.982 seconds with return value 0
Press any key to continue . . . █
```

**PROJECT COMPLETE :**

**THANKYOU😊...**

**CS241149:**

**ROHIT RAJ😊**

**WITH ARYAN KUMAR😊**