

```
#include <stdio.h>

#include <string.h>

#define MAX_ITEMS 100

struct Product {
    char name[50];
    float rate;
    int quantity;
    float amount;
};

// Clear Purchase Product (Bill)
void clearItems(int *numItems)
{
    *numItems = 0;
}

// Print Product Master List
void printProductList() {
    printf("\nProduct List\n");
    printf("-----\n");
    printf("1. Tea      Rs.10\n");
    printf("2. Coffee   Rs.15\n");
}
```

```
printf("3. Cool Drinks Rs.20\n");  
printf("4. Exit\n");  
printf("-----\n");  
}
```

```
// Add Purchase Product
```

```
void addItems(struct Product items[], int *numItems) {  
    char chyn = 'y';  
    while (chyn == 'y' || chyn == 'Y') {  
        int prdopt;  
        printProductList();  
        printf("Enter your Product Option: ");  
        int ch2;  
        prdopt = 0;  
        do {  
            ch2 = getchar();  
            // Checks the ASCII code of '  
            // digits 0 to 9  
            if (ch2 >= 48 && ch2 <= 57) {  
                // To make a digit  
                prdopt = prdopt * 10 + (ch2 - 48);  
            }  
            // 13 is carriage return it breaks  
            // and return the input
```

```
        else if (ch2 == '\n')
        {
                break;
        }

else
{
        prdopt = 12;
}

} while (1);

if (prdopt == 1) {
        strcpy(items[*numItems].name, "Tea");
        items[*numItems].rate = 10.0;
} else if (prdopt == 2) {
        strcpy(items[*numItems].name, "Coffee");
        items[*numItems].rate = 15.0;
} else if (prdopt == 3) {
        strcpy(items[*numItems].name, "Cool Drinks");
        items[*numItems].rate = 20.0;
} else if (prdopt == 4) {
        break;
} else {
        printf("Invalid option. Please try again.\n");
        continue;
}

int prdqty;
```

```
printf("Enter the number of [%s] quantity: ",items[*numItems].name);

int ch3;

prdqty = 0;

do {

    ch3 = getchar();

    // Checks the ASCII code of '

    // digits 0 to 9

    if (ch3 >= 48 && ch3 <= 57) {

        // To make a digit

        prdqty = prdqty * 10 + (ch3 - 48);

    }

    // 13 is carriage return it breaks

    // and return the input

    else if (ch3 == '\n')

    {

        break;

    }

else

{

    prdqty = 101;

}

} while (1);

if (prdqty <= 0 || prdqty > 100) {

    printf("Invalid quantity. Please enter [1 to 100].\n");

    continue;
```

```

    }

    items[*numItems].quantity = prdqty;

    items[*numItems].amount = items[*numItems].rate * items[*numItems].quantity;

    (*numItems)++;

}

}

```

// View Purchase Product

```

void viewPurchasedItems(struct Product items[], int *numItems) {

    if (*numItems == 0) {

        printf("\nNo Purchase Product Available !!!\n");

    } else {

        printf("\nThe products are:\n");

        printf("-----\n");

        printf("%-5s %-15s %15s\n", "Sno", "Product", "Quantity");

        printf("-----\n");

        for (int i = 0; i < *numItems; i++)

        {

            printf("%-5d %-15s %15d\n", i+1, items[i].name, items[i].quantity);

        }

        printf("-----\n");

    }

}

```

```

// Delete Purchase Product Particular Row

void deletePurchasedItems(struct Product items[], int *numItems) {

    if (*numItems == 0)

    {

        printf("\nNo Purchase Product Available !!!\n");

        return;

    }

    else

    {

        printf("\nThe products are:\n");

        printf("-----\n");

        printf("%-5s %-15s %15s\n", "Sno", "Product", "Quantity");

        printf("-----\n");

        for (int i = 0; i < *numItems; i++)

        {

            printf("%-5d %-15s %15d\n", i+1, items[i].name, items[i].quantity);

        }

        printf("-----\n");

    }

    char chynd = 'y';

    while (chynd == 'y' || chynd == 'Y') {

        int prdsno;

        printf("Enter the Sno number [ 1 to %d ] for Delete [ 0 - for Exit ]: ", *numItems);

        int ch3;

        prdsno = 0;
    }
}

```

```
do {  
    ch3 = getchar();  
    // Checks the ASCII code of '  
    // digits 0 to 9  
    if (ch3 >= 48 && ch3 <= 57) {  
        // To make a digit  
        prdsno = prdsno * 10 + (ch3 - 48);  
    }  
    // 13 is carriage return it breaks  
    // and return the input  
    else if (ch3 == '\n')  
    {  
        break;  
    }  
    else  
    {  
        prdsno = 101;  
    }  
} while (1);  
if (prdsno == 0)  
{  
    return;  
}  
if (prdsno <= 0 || prdsno > (*numItems))  
{
```

```

        printf("Invalid Sno Number.\n");

        continue;
    }

    for (int i = prdsno - 1; i < (*numItems); i++)
    {
        items[i] = items[i+1];
    }
    (*numItems)--;
    printf("| Product Deleted |\n");
    return;
}
}

```

// View Invoice Bill

```

void PrintBill(struct Product items[], int *numItems) {

    float sum = 0;

    if (*numItems == 0) {

        printf("\nNo Purchase Product Avilable !!!\n");

    }

    else

    {

        printf("\n          || L3 CAFE E-INVOICE CREATOR ||          \n");

        printf("-----\n");
    }
}

```



```

printf("%-15s %15s %15s %15s\n", "Product", "Rate", "Quantity", "Amount");

printf("-----\n");

for (int i = 0; i < *numItems; i++)
{
    printf("%-15s %15.2f %15d %15.2f\n", items[i].name, items[i].rate, items[i].quantity,
items[i].amount);

    sum += items[i].amount;
}

printf("-----\n");

printf("                Total: %15.2f\n", sum);

printf("-----\n");
}
}

```

```

int main() {

    struct Product items[MAX_ITEMS];

    char pro[MAX_ITEMS][50];

    float total[MAX_ITEMS];

    int numItems = 0;

    float sum = 0;

    int opt = 0;

    while (1) {

        printf("\nMain Menu\n");

        printf("===== \n");

        printf("1. Add Product\n");

        printf("2. View Purchased Products List\n");
    }
}

```

```
printf("3. Print Bill\n");

printf("4. Delete Product\n");

printf("5. Clear Bill\n");

printf("6. Exit\n");

printf("=====\n");

printf("Enter your Option [1 to 6]: ");

    int ch1;

    opt = 0;

    do {

        ch1 = getchar();

        // Checks the ASCII code of '

        // digits 0 to 9

        if (ch1 >= 48 && ch1 <= 57) {

            // To make a digit

            opt = opt * 10 + (ch1 - 48);

        }

        // 13 is carriage return it breaks

        // and return the input

        else if (ch1 == '\n')

        {

            break;

        }

    else

    {

        opt = 12;
```

```
    }  
    } while (1);  
if (opt == 1) {  
    addItem(items, &numItems);  
}  
else if (opt == 2) {  
    viewPurchasedItems(items, &numItems);  
}  
else if (opt == 3) {  
    PrintBill(items, &numItems);  
}  
else if (opt == 4) {  
    deletePurchasedItems(items, &numItems);  
}  
else if (opt == 5) {  
    clearItems(&numItems);  
    printf(" | Products are Cleared |\n");  
}  
else if (opt == 6) {  
    printf(" | | Thank You | |\n");  
    printf("Visit Again! :)");  
    break;  
}  
else {  
    printf("Not a Valid Option, try again\n");
```

```
    }  
}  
return 0;  
}
```