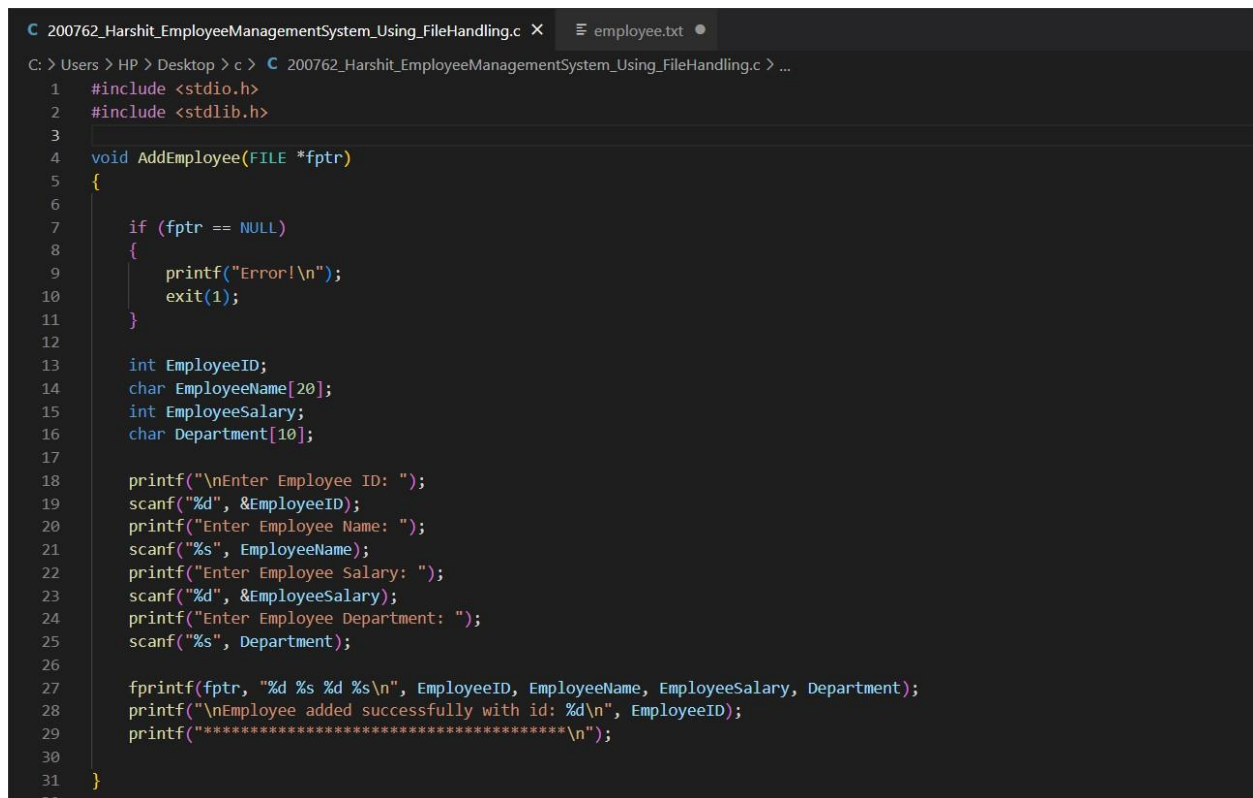


Employee Management System using File Handling

Name: Harshit Carpenter

Batch : GGN_02_27th July_C

Code Screenshots :



```
C: 200762_Harshit_EmployeeManagementSystem_Using_FileHandling.c  employee.txt
C: > Users > HP > Desktop > c > C: 200762_Harshit_EmployeeManagementSystem_Using_FileHandling.c > ...
1  #include <stdio.h>
2  #include <stdlib.h>
3
4  void AddEmployee(FILE *fptr)
5  {
6
7      if (fptr == NULL)
8      {
9          printf("Error!\n");
10         exit(1);
11     }
12
13     int EmployeeID;
14     char EmployeeName[20];
15     int EmployeeSalary;
16     char Department[10];
17
18     printf("\nEnter Employee ID: ");
19     scanf("%d", &EmployeeID);
20     printf("Enter Employee Name: ");
21     scanf("%s", EmployeeName);
22     printf("Enter Employee Salary: ");
23     scanf("%d", &EmployeeSalary);
24     printf("Enter Employee Department: ");
25     scanf("%s", Department);
26
27     fprintf(fptr, "%d %s %d %s\n", EmployeeID, EmployeeName, EmployeeSalary, Department);
28     printf("\nEmployee added successfully with id: %d\n", EmployeeID);
29     printf("*****\n");
30
31 }
```

```
C 200762_Harshit_EmployeeManagementSystem_Using_FileHandling.c X employee.txt
C: > Users > HP > Desktop > c > C 200762_Harshit_EmployeeManagementSystem_Using_FileHandling.c > AddEmployee(FILE *)

33 void DeleteEmployee(FILE *fptr)
34 {
35     int dlt_id;
36     printf("\nEnter id You want to delete: ");
37     scanf("%d", &dlt_id);
38
39     FILE *tempFile = fopen("C:\\Users\\HP\\Desktop\\c\\temp_employee.txt", "w");
40
41     if (tempFile == NULL)
42     {
43         printf("Error!\n");
44         exit(1);
45     }
46
47     int EmployeeID;
48     char EmployeeName[20];
49     int EmployeesSalary;
50     char Department[10];
51
52     while (fscanf(fptr, "%d %s %d %s", &EmployeeID, EmployeeName, &EmployeesSalary, Department) != EOF)
53     {
54
55         if (EmployeeID != dlt_id)
56         {
57
58             fprintf(tempFile, "%d %s %d %s\n", EmployeeID, EmployeeName, EmployeesSalary, Department);
59         }
60     }
61
62     fclose(fptr);
63     fclose(tempFile);
64
65     remove("C:\\Users\\HP\\Desktop\\c\\employee.txt");
66     rename("C:\\Users\\HP\\Desktop\\c\\temp_employee.txt", "C:\\Users\\HP\\Desktop\\c\\employee.txt");
67
```

```
C 200762_Harshit_EmployeeManagementSystem_Using_FileHandling.c X employee.txt
C: > Users > HP > Desktop > c > C 200762_Harshit_EmployeeManagementSystem_Using_FileHandling.c > AddEmployee(FILE *)

67     printf("\nEmployee id: %d deleted successfully\n", dlt_id);
68     printf("*****\n");
69 }
70
71
72 void ShowEmployee(FILE *fptr)
73 {
74     printf("\n");
75     printf("*****\n");
76
77     int EmployeeID;
78     char EmployeeName[20];
79     int EmployeesSalary;
80     char Department[10];
81
82     while (fscanf(fptr, "%d %s %d %s", &EmployeeID, EmployeeName, &EmployeesSalary, Department) != EOF)
83     {
84         printf(" | Employee ID : %d | \t", EmployeeID);
85         printf("Employee Name : %s | \t", EmployeeName);
86         printf("Employee Salary : %d | \t", EmployeesSalary);
87         printf("Employee Department : %s | \n\n", Department);
88     }
89
90     printf("*****\n");
91 }
92
```

```
C 200762_Harshit_EmployeeManagementSystem_Using_FileHandling.c X employee.txt
C: > Users > HP > Desktop > c > C 200762_Harshit_EmployeeManagementSystem_Using_FileHandling.c > AddEmployee(FILE *)

93 void UpdateEmployee(FILE *fptr)
94 {
95     int upd_id;
96     printf("\nSelect id You want to update: ");
97     scanf("%d", &upd_id);
98
99     FILE *tempFile = fopen("C:\\Users\\HP\\Desktop\\c\\temp_employee.txt", "w");
100     if (tempFile == NULL)
101     {
102         printf("Error!\n");
103         exit(1);
104     }
105
106     int EmployeeID;
107     char EmployeeName[20];
108     int EmployeeSalary;
109     char Department[10];
110
111     while (fscanf(fptr, "%d %s %d %s", &EmployeeID, EmployeeName, &EmployeeSalary, Department) != EOF)
112     {
113         if (EmployeeID == upd_id)
114         {
115             printf("Current Employee Name: %s\n", EmployeeName);
116             printf("Enter Updated Employee Name: ");
117             scanf("%s", EmployeeName);
118             printf("Current Employee Salary: %d\n", EmployeeSalary);
119             printf("Enter Updated Employee Salary: ");
120             scanf("%d", &EmployeeSalary);
121             printf("Current Employee Department: %s\n", Department);
122             printf("Enter Updated Employee Department: ");
123             scanf("%s", Department);
124         }
125
126         fprintf(tempFile, "%d %s %d %s\n", EmployeeID, EmployeeName, EmployeeSalary, Department);
127     }
128 }
```

```
C 200762_Harshit_EmployeeManagementSystem_Using_FileHandling.c X employee.txt
C: > Users > HP > Desktop > c > C 200762_Harshit_EmployeeManagementSystem_Using_FileHandling.c > AddEmployee(FILE *)

129 fclose(fptr);
130 fclose(tempFile);
131
132 remove("C:\\Users\\HP\\Desktop\\c\\employee.txt");
133 rename("C:\\Users\\HP\\Desktop\\c\\temp_employee.txt", "C:\\Users\\HP\\Desktop\\c\\employee.txt");
134
135 printf("\nEmployee id: %d updated successfully\n", upd_id);
136 printf("*****\n");
137 }
138
139 int main()
140 {
141     int ch;
142     FILE *fptr;
143
144     printf("\n*****\n");
145     printf("\nWelcome to the Employee Management System\n");
146     printf("\n*****\n");
147
148     while (1)
149     {
150         printf("\nSelect an option:\n");
151         printf("1.Add an Employee\n");
152         printf("2.Delete an Employee\n");
153         printf("3.Show Employees\n");
154         printf("4.Update an Employee\n");
155         printf("5.Exit\n");
156
157         printf("\nEnter your choice: ");
158         scanf("%d", &ch);
159     }
```

```
C 200762_Harshit_EmployeeManagementSystem_Using_FileHandling.c x employee.txt
C: > Users > HP > Desktop > c > C 200762_Harshit_EmployeeManagementSystem_Using_FileHandling.c > AddEmployee(FILE *)

160     switch (ch)
161     {
162     case 1:
163         fptr = fopen("C:\\Users\\HP\\Desktop\\c\\employee.txt", "a");
164         AddEmployee(fptr);
165         fclose(fptr);
166         break;
167     case 2:
168         fptr = fopen("C:\\Users\\HP\\Desktop\\c\\employee.txt", "r");
169         DeleteEmployee(fptr);
170         break;
171     case 3:
172         fptr = fopen("C:\\Users\\HP\\Desktop\\c\\employee.txt", "r");
173         if (fptr == NULL)
174         {
175             printf("Error!\n");
176             exit(1);
177         }
178         ShowEmployee(fptr);
179         fclose(fptr);
180         break;
181     case 4:
182         fptr = fopen("C:\\Users\\HP\\Desktop\\c\\employee.txt", "r+");
183         if (fptr == NULL)
184         {
185             printf("Error!\n");
186             exit(1);
187         }
188         UpdateEmployee(fptr);
189         break;
190     case 5:
191         printf("\nThank you! Have a nice day.\n");
192         exit(0);
193     default:
194         printf("\nInvalid choice! Please select a valid option.\n");
195     }
196 }
```

```
C 200762_Harshit_EmployeeManagementSystem_Using_FileHandling.c x employee.txt
C: > Users > HP > Desktop > c > C 200762_Harshit_EmployeeManagementSystem_Using_FileHandling.c > AddEmployee(FILE *)

193     default:
194         printf("\nInvalid choice! Please select a valid option.\n");
195     }
196 }
197
198 return 0;
199 }
200
```

Source Code:

```

#include <stdio.h>
#include <stdlib.h>

void AddEmployee(FILE *fptr)
{
    if (fptr == NULL)
    {
        printf("Error!\n");
        exit(1);
    }

    int EmployeeID;
    char EmployeeName[20];
    int EmployeeSalary;
    char Department[10];

    printf("\nEnter Employee ID: ");
    scanf("%d", &EmployeeID);
    printf("Enter Employee Name: ");
    scanf("%s", EmployeeName);
    printf("Enter Employee Salary: ");
    scanf("%d", &EmployeeSalary);
    printf("Enter Employee Department: ");
    scanf("%s", Department);

    fprintf(fptr, "%d %s %d %s\n", EmployeeID, EmployeeName, EmployeeSalary,
Department);
    printf("\nEmployee added successfully with id: %d\n", EmployeeID);
    printf("*****\n");
}

void DeleteEmployee(FILE *fptr)
{
    int dlt_id;
    printf("\nEnter id You want to delete: ");
    scanf("%d", &dlt_id);

    FILE *tempFile = fopen("C:\\Users\\HP\\Desktop\\c\\temp_employee.txt", "w");

    if (tempFile == NULL)
    {
        printf("Error!\n");
        exit(1);
    }

    int EmployeeID;
    char EmployeeName[20];
    int EmployeeSalary;
    char Department[10];

    while (fscanf(fptr, "%d %s %d %s", &EmployeeID, EmployeeName, &EmployeeSalary,
Department) != EOF)
    {
        if (EmployeeID != dlt_id)
        {

```

```

        fprintf(tempFile, "%d %s %d %s\n", EmployeeID, EmployeeName,
EmployeeSalary, Department);
    }

    fclose(fptr);
    fclose(tempFile);

    remove("C:\\Users\\HP\\Desktop\\c\\employee.txt");
    rename("C:\\Users\\HP\\Desktop\\c\\temp_employee.txt", "C:\\Users\\HP\\
Desktop\\c\\employee.txt");

    printf("\nEmployee id: %d deleted successfully\n", dlt_id);
    printf("*****\n");
}

void ShowEmployee(FILE *fptr)
{
    printf("\n");

    printf("#####\n\n");

    int EmployeeID;
    char EmployeeName[20];
    int EmployeeSalary;
    char Department[10];

    while (fscanf(fptr, "%d %s %d %s", &EmployeeID, EmployeeName, &EmployeeSalary,
Department) != EOF)
    {
        printf(" | Employee ID : %d | \t", EmployeeID);
        printf("Employee Name : %s | \t", EmployeeName);
        printf("Employee Salary : %d | \t", EmployeeSalary);
        printf("Employee Department : %s | \n\n", Department);
    }

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

void UpdateEmployee(FILE *fptr)
{
    int upd_id;
    printf("\nSelect id You want to update: ");
    scanf("%d", &upd_id);

    FILE *tempFile = fopen("C:\\Users\\HP\\Desktop\\c\\temp_employee.txt", "w");
    if (tempFile == NULL)
    {
        printf("Error!\n");
        exit(1);
    }

    int EmployeeID;
    char EmployeeName[20];
    int EmployeeSalary;
    char Department[10];

```

```

        while (fscanf(fptr, "%d %s %d %s", &EmployeeID, EmployeeName, &EmployeeSalary,
Department) != EOF)
        {
            if (EmployeeID == upd_id)
            {
                printf("Current Employee Name: %s\n", EmployeeName);
                printf("Enter Updated Employee Name: ");
                scanf("%s", EmployeeName);
                printf("Current Employee Salary: %d\n", EmployeeSalary);
                printf("Enter Updated Employee Salary: ");
                scanf("%d", &EmployeeSalary);
                printf("Current Employee Department: %s\n", Department);
                printf("Enter Updated Employee Department: ");
                scanf("%s", Department);
            }

            fprintf(tempFile, "%d %s %d %s\n", EmployeeID, EmployeeName,
EmployeeSalary, Department);
        }

        fclose(fptr);
        fclose(tempFile);

        remove("C:\\Users\\HP\\Desktop\\c\\employee.txt");
        rename("C:\\Users\\HP\\Desktop\\c\\temp_employee.txt", "C:\\Users\\HP\\
Desktop\\c\\employee.txt");

        printf("\nEmployee id: %d updated successfully\n", upd_id);
        printf("*****\n");
    }

int main()
{
    int ch;
    FILE *fptr;

    printf("\n*****\n");
    printf("\nWelcome to the Employee Management System\n");
    printf("\n*****\n");

    while (1)
    {
        printf("\nSelect an option:\n");
        printf("1.Add an Employee\n");
        printf("2.Delete an Employee\n");
        printf("3.Show Employees\n");
        printf("4.Update an Employee\n");
        printf("5.Exit\n");

        printf("\nEnter your choice: ");
        scanf("%d", &ch);

        switch (ch)
        {
            case 1:
                fptr = fopen("C:\\Users\\HP\\Desktop\\c\\employee.txt", "a");
                AddEmployee(fptr);
                fclose(fptr);

```

```

        break;
    case 2:
        fptr = fopen("C:\\Users\\HP\\Desktop\\c\\employee.txt", "r");
        DeleteEmployee(fptr);
        break;
    case 3:
        fptr = fopen("C:\\Users\\HP\\Desktop\\c\\employee.txt", "r");
        if (fptr == NULL)
        {
            printf("Error!\n");
            exit(1);
        }
        ShowEmployee(fptr);
        fclose(fptr);
        break;
    case 4:
        fptr = fopen("C:\\Users\\HP\\Desktop\\c\\employee.txt", "r+");
        if (fptr == NULL)
        {
            printf("Error!\n");
            exit(1);
        }
        UpdateEmployee(fptr);
        break;
    case 5:
        printf("\nThank you! Have a nice day.\n");
        exit(0);
    default:
        printf("\nInvalid choice! Please select a valid option.\n");
    }
}

return 0;
}

```


Output Screenshots :

```
C 200762_Harshit_EmployeeManagementSystem_Using_FileHandling.c  employee.txt x
C: > Users > HP > Desktop > c > employee.txt
1 100 Harshit 40000 Ensemble
2

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL
cppdbg: 200762_Harshit_EmployeeManagementSystem_Using_FileHandling.exe + v [ ] [ ] ...

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PS C:\Users\HP> & 'c:\Users\HP\.vscode\extensions\ms-vscode.cpptools-1.17.2-win32-x64\debugAdapters\bin\WindowsDebugLauncher.exe' '--stdin=Microsoft-MIEngine-In-0hkd2iey.afs' '--stdout=Microsoft-MIEngine-Out-aiw5xcx.xgm' '--stderr=Microsoft-MIEngine-Error-ee5qmuk5.5ux' '--pid=Microsoft-MIEngine-Pid-Fa4mbtfn.sjq' '--dbgExe=C:\Windows\bin\gdb.exe' '--interpreter=mi'

*****

Welcome to the Employee Management System

*****

Select an option:
1.Add an Employee
2.Delete an Employee
3.Show Employees
4.Update an Employee
5.Exit

Enter your choice: 1

Enter Employee ID: 100
Enter Employee Name: Harshit
Enter Employee Salary: 40000
Enter Employee Department: Ensemble

Employee added successfully with id: 100
*****
```

```
C 200762_Harshit_EmployeeManagementSystem_Using_FileHandling.c  employee.txt x
C: > Users > HP > Desktop > c > employee.txt
1 100 Harshit 40000 Ensemble
2 101 Gaurav 30000 Migration
3

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL
cppdbg: 200762_Harshit_EmployeeManagementSystem_Using_FileHandling.exe + v [ ] [ ] ...

Enter Employee Department: Ensemble

Employee added successfully with id: 100
*****

Select an option:
1.Add an Employee
2.Delete an Employee
3.Show Employees
4.Update an Employee
5.Exit

Enter your choice: 1

Enter Employee ID: 101
Enter Employee Name: Gaurav
Enter Employee Salary: 30000
Enter Employee Department: Migration

Employee added successfully with id: 101
*****

Select an option:
1.Add an Employee
2.Delete an Employee
3.Show Employees
4.Update an Employee
5.Exit
```

```
C 200762_Harshit_EmployeeManagementSystem_Using_FileHandling.c  employee.txt X
C:\Users> HP > Desktop > c>  employee.txt
1 100 Harshit 40000 Ensemble
2 101 Gaurav 30000 Migration
3 102 Shivam 20000 D&I
4

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL
cppdbg: 200762_Harshit_EmployeeManagementSystem_Using_FileHandling.exe + v  [ ] [ ] ...

Enter Employee Department: Migration
Employee added successfully with id: 101
*****

Select an option:
1.Add an Employee
2.Delete an Employee
3.Show Employees
4.Update an Employee
5.Exit

Enter your choice: 1

Enter Employee ID: 102
Enter Employee Name: Shivam
Enter Employee Salary: 20000
Enter Employee Department: D&I

Employee added successfully with id: 102
*****

Select an option:
1.Add an Employee
2.Delete an Employee
3.Show Employees
4.Update an Employee
5.Exit
```

```
C 200762_Harshit_EmployeeManagementSystem_Using_FileHandling.c  employee.txt X
C:\Users> HP > Desktop > c>  employee.txt
1 100 Harshit 40000 Ensemble
2 101 Gaurav 30000 Migration
3 102 Shivam 20000 D&I
4

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL
cppdbg: 200762_Harshit_EmployeeManagementSystem_Using_FileHandling.exe + v  [ ] [ ] ...

Employee added successfully with id: 102
*****

Select an option:
1.Add an Employee
2.Delete an Employee
3.Show Employees
4.Update an Employee
5.Exit

Enter your choice: 3

*****

| Employee ID : 100 | Employee Name : Harshit | Employee Salary : 40000 | Employee Department : Ensemble |
| Employee ID : 101 | Employee Name : Gaurav | Employee Salary : 30000 | Employee Department : Migration |
| Employee ID : 102 | Employee Name : Shivam | Employee Salary : 20000 | Employee Department : D&I |
*****

Select an option:
1.Add an Employee
2.Delete an Employee
3.Show Employees
4.Update an Employee
5.Exit
```

```
C 200762_Harshit_EmployeeManagementSystem_Using_FileHandling.c  employee.txt X
C:\Users> HP > Desktop > c>  employee.txt
1 100 Harshit 40000 Ensemble
2 101 Satyam 50000 AT
3 102 Shivam 20000 D&I
4

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL
cppdbg: 200762_Harshit_EmployeeManagementSystem_Using_FileHandling.exe +  v  o  ...

#####

Select an option:
1.Add an Employee
2.Delete an Employee
3.Show Employees
4.Update an Employee
5.Exit

Enter your choice: 4

Select id You want to update: 101
Current Employee Name: Gaurav
Enter Updated Employee Name: Satyam
Current Employee Salary: 30000
Enter Updated Employee Salary: 50000
Current Employee Department: Migration
Enter Updated Employee Department: AT

Employee id: 101 updated successfully
#####

Select an option:
1.Add an Employee
2.Delete an Employee
3.Show Employees
4.Update an Employee
5.Exit
```

```
C 200762_Harshit_EmployeeManagementSystem_Using_FileHandling.c  employee.txt X
C:\Users> HP > Desktop > c>  employee.txt
1 100 Harshit 40000 Ensemble
2 101 Satyam 50000 AT
3 102 Shivam 20000 D&I
4

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL
cppdbg: 200762_Harshit_EmployeeManagementSystem_Using_FileHandling.exe +  v  o  ...

Employee id: 101 updated successfully
#####

Select an option:
1.Add an Employee
2.Delete an Employee
3.Show Employees
4.Update an Employee
5.Exit

Enter your choice: 3

#####

| Employee ID : 100 | Employee Name : Harshit | Employee Salary : 40000 | Employee Department : Ensemble |
| Employee ID : 101 | Employee Name : Satyam | Employee Salary : 50000 | Employee Department : AT |
| Employee ID : 102 | Employee Name : Shivam | Employee Salary : 20000 | Employee Department : D&I |

#####

Select an option:
1.Add an Employee
2.Delete an Employee
3.Show Employees
4.Update an Employee
5.Exit
```

```
C 200762_Harshit_EmployeeManagementSystem_Using_FileHandling.c  employee.txt X
C:\> Users > HP > Desktop > c >  employee.txt
1  100 Harshit 40000 Ensemble
2  102 Shivam 20000 D&I
3

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL
cppdbg: 200762_Harshit_EmployeeManagementSystem_Using_FileHandling.exe +  v  ...

| Employee ID : 100 | Employee Name : Harshit | Employee Salary : 40000 | Employee Department : Ensemble |
| Employee ID : 101 | Employee Name : Satyam | Employee Salary : 50000 | Employee Department : AT |
| Employee ID : 102 | Employee Name : Shivam | Employee Salary : 20000 | Employee Department : D&I |

#####

Select an option:
1.Add an Employee
2.Delete an Employee
3.Show Employees
4.Update an Employee
5.Exit

Enter your choice: 2

Enter id you want to delete: 101

Employee id: 101 deleted successfully
#####

Select an option:
1.Add an Employee
2.Delete an Employee
3.Show Employees
4.Update an Employee
5.Exit
```

```
C 200762_Harshit_EmployeeManagementSystem_Using_FileHandling.c  employee.txt X
C:\> Users > HP > Desktop > c >  employee.txt
1  100 Harshit 40000 Ensemble
2  102 Shivam 20000 D&I
3

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL
cppdbg: 200762_Harshit_EmployeeManagementSystem_Using_FileHandling.exe +  v  ...

Enter id you want to delete: 101

Employee id: 101 deleted successfully
#####

Select an option:
1.Add an Employee
2.Delete an Employee
3.Show Employees
4.Update an Employee
5.Exit

Enter your choice: 3

#####

| Employee ID : 100 | Employee Name : Harshit | Employee Salary : 40000 | Employee Department : Ensemble |
| Employee ID : 102 | Employee Name : Shivam | Employee Salary : 20000 | Employee Department : D&I |

#####

Select an option:
1.Add an Employee
2.Delete an Employee
3.Show Employees
4.Update an Employee
5.Exit
```

```
Select an option:
1.Add an Employee
2.Delete an Employee
3.Show Employees
4.Update an Employee
5.Exit

Enter your choice: 6

Invalid choice! Please select a valid option.

Select an option:
1.Add an Employee
2.Delete an Employee
3.Show Employees
4.Update an Employee
5.Exit

Enter your choice: 5

Thank you! Have a nice day.
PS C:\Users\VIP>
```