# institute of Computer Technology B. Tech. Computer Science and Engineering

Sub: ESFP - I

Course Code: 2CSE102

Practical - 18

Name: Dwij vatsal desai

Roll No:BDA-08

Branch:BDA

Class: B Batch:14

# Q.1.Problem Definition:

Mr. Bhavin and Rajiv are the students of R.K College, which is situated at Kothroad, Pune. They have taken IT as a vocational subject in his college. Bhavin is a good student in his college as compared to Rajiv, and both are good friends. So, Bhavin always takes care of Rajiv in his college in terms of academic education. One day, Mr. Bhavin said to his friend Rajiv to do one program on file handling concept, where he has to write some information in student.txt file and then he needs to print all written text on screen/terminal. So, for the fulfillment of the above said requirement, make an appropriate file handling program in C to read some information / paragraph text in student.txt file from terminal and then print this all written line/paragraph text on screen/terminal from student.txt file.

### Code:

```
#include <stdlib.h>
#include <stdlib.h>
int main()
{
    FILE *file;
    char ch;
    file = fopen("C:/ICT/SEM-1/ESFP/code/Practical-18/student.txt", "r");
    if (file == NULL)
    {
        printf("File not found or unable to open the file.\n");
        return 1;
    }
    while ((ch = fgetc(file)) != EOF)
    {
}
```

```
putchar(ch);
}
fclose(file);
return 0;
}
```

## **Output:**

```
    PS C:\ICT\SEM-1\ESFP\code\Practical-18> cd 'c:\ICT\SEM-1\ESFP\code\Practical-18\output'
    PS C:\ICT\SEM-1\ESFP\code\Practical-18\output> & .\'q1.exe'
    The number one benefit of information technology is that it empowers people to do what they want to do. It lets people be creative. It lets people be productive. It lets people learn things they didn't think they could learn before, and so in a sense it is all about potential.
    PS C:\ICT\SEM-1\ESFP\code\Practical-18\output>
```

## Q.2.Problem Definition:

Make a file handling program in C, to accept any ten random integer numbers in text file1 and then keep all odd numbers in text file2 and all even numbers in text file3, and then display the content of odd number file2 and even number file3 on screen.

#### Code:

```
#include <stdio.h>
int main()
{
    FILE *file1 =
fopen("C:\\ICT\\SEM-1\\ESFP\\code\\Practical-18\\file1.txt","r");

    if (file1 == NULL)
    {
        printf("Error opening file1.txt for reading.\n");
        return 1;
    }

    FILE *file2 = fopen("file2.txt", "w");
    FILE *file3 = fopen("file3.txt", "w");

    if (file2 == NULL || file3 == NULL)
```

```
printf("Error opening file2.txt or file3.txt for writing.\n");
    return 1;
int num;
while (fscanf(file1, "%d", &num) == 1)
      fprintf(file3, "%d ", num);
    else
       fprintf(file2, "%d ", num);
fclose(file1);
fclose(file2);
fclose(file3);
file2 = fopen("file2.txt", "r");
file3 = fopen("file3.txt", "r");
if (file2 == NULL || file3 == NULL)
   printf("Error opening file2.txt or file3.txt for reading.\n");
   return 1;
printf("Contents of ODD number in file2: ");
while (fscanf(file2, "%d", &num) == 1)
printf("Contents of EVEN number in file3: ");
while (fscanf(file3, "%d", &num) == 1)
```

```
fclose(file2);
fclose(file3);

return 0;
}
```

## **Output:**

```
PS C:\ICT\SEM-1\ESFP\code\Practical-18> cd 'c:\ICT\SEM-1\ESFP\code\Practical-18\output'

PS C:\ICT\SEM-1\ESFP\code\Practical-18\output> & .\'q2.exe'

Contents of ODD number in file2: 1 3 5 7 9
Contents of EVEN number in file3: 2 4 6 8 10
PS C:\ICT\SEM-1\ESFP\code\Practical-18\output>
```

# Q.3.Problem Definition:

Make a program in C to accept 5 employee records from users and write this record in employee.txt file, and then find employee records by ID and then print this record on screen using the file handling concept.

## Code:

```
#include <string.h>
#include <string.h>
struct Employee
{
    int Emp_Id;
    char Emp_Name[50];
    char Emp_Dept[50];
    char Emp_Designation[50];
    int Salary;
};

int main()
{
    struct Employee emp;
    int choice, id;
    char name[50];
    FILE *file;
```

```
file = fopen("C:/ICT/SEM-1/ESFP/code/Practical-18/employee.txt",
"a+");
   if (file == NULL)
       printf("Unable to open the file.\n");
       return 1;
   printf("1. Enter employee record\n2. Find employee record by
ID\n3.Exit\n");
   printf("Enter your choice: ");
   scanf("%d", &choice);
    while (choice != 3)
        switch (choice)
                printf("Enter employee details (Emp Id, Emp Name,
Emp Dept,Emp Designation, Salary): ");
                scanf("%d %s %s %s %d", &emp.Emp Id,
emp.Emp Name,emp.Emp Dept, emp.Emp Designation, &emp.Salary);
                fprintf(file, "%d %s %s %s %d\n", emp.Emp Id,
emp.Emp Name,emp.Emp Dept, emp.Emp Designation, emp.Salary);
            break;
            case 2:
                printf("Enter the employee ID to find: ");
                scanf("%d", &id);
                rewind(file);
                int found = 0;
                while (fscanf(file, "%d %s %s %s %d\n", &emp.Emp_Id,
                emp.Emp Name, emp.Emp Dept, emp.Emp Designation,
&emp.Salary) != EOF)
```

```
if (emp.Emp_Id == id)
                        printf("%d %s %s %s %d\n", emp.Emp Id,
emp.Emp Name,
                        emp.Emp Dept, emp.Emp Designation,
emp.Salary);
                        found = 1;
                        break;
                if (!found)
                    printf("Employee not found with ID %d\n", id);
            break;
            default:
            printf("Invalid choice. Please try again.\n");
       printf("\n1. Enter employee record\n2. Find employee record
by ID\n3.Exit\n");
       printf("Enter your choice: ");
       scanf("%d", &choice);
   fclose(file);
```

# **Output:**

```
PS C:\ICT\SEM-1\ESFP\code\Practical-18\output> & .\'q3.exe'

1. Enter employee record

2. Find employee record by ID

3. Exit
Enter your choice: 1
Enter employee record

2. Find employee record

3. Find employee record

4. Find employee record

5. Exit
Enter employee details (Emp_Id, Emp_Name, Emp_Dept, Emp_Designation, Salary): 1002 jaimin DEV SOE 50000

1. Enter employee record

2. Find employee details (Emp_Id, Emp_Name, Emp_Dept, Emp_Designation, Salary): 1004 kashish CS Analyst 80000

1. Enter employee record

2. Find employee record

2. Find employee record

3. Exit
Enter your choice: 2
Enter the employee ID to find: 1002

1002 jaimin DEV SOE 50000

1. Enter employee record

2. Find employee record

3. Exit
Enter polyee record

4. Find employee record

5. Find employee record

6. Find employee record

7. Find employee record

8. Find employee record

9. Find employee record

10. Exit
Enter your choice: 1
```