

File Handling

1. File1.c //reading character from file and displaying it

```
#include <stdio.h>

int main() {
    FILE *file;
    file= fopen("G:\\CProgram\\Hello1.c", "r+");
    if (file == NULL) {
        printf("File not found or could not be opened.\n");
        return 1;
    }

    // Read and display initial content
    char ch;
    while ((ch = fgetc(file)) != EOF) {
        putchar(ch);
    }

    // Move the file pointer to the beginning
    rewind(file);

    // Write to the file
    fprintf(file, "Hello, World!");

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

2. reading string from file and displaying it File2.c

```
#include <stdio.h>

int main() {
    FILE *file = fopen("G:\\CProgram\\data2.txt", "r");
    if (file == NULL) {
        printf("File not found.\n");
        return 1;
    }

    char line[100];
    while (fgets(line, sizeof(line), file) != NULL) {
        printf("%s", line);
    }

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

```
}
```

3. writing string to the file

```
//Print String
```

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

```
int main() {
```

```
    // Open file in write mode
```

```
    FILE *file = fopen("G:\\CProgram\\example100.txt", "w+");
```

```
    if (file == NULL) {
```

```
        puts("Error opening file");
```

```
        return 1;
```

```
    }
```

```
    // String to write
```

```
    char str[] = "Hello, this is a test string.";
```

```
    // Write string to the file
```

```
    if (fputs(str, file) == EOF) {
```

```
        printf("Error writing to file");
```

```
        fclose(file);
```

```
        return 1;
```

```
    }
```

```
    printf("String written to the file successfully.\n");
```

```
    // Close the file
```

```
    fclose(file);
```

```
    return 0;
}
```

4. writing multiple lines of string to the file

```
// read paragraph
```

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

```
int main() {
    // Open file in write mode
    FILE *file = fopen("G:\\CProgram\\example5.txt", "w");
    if (file == NULL) {
        puts("Error opening file");
        return 1;
    }
```

```
    // Array of strings to write
```

```
    char *lines[50] = {
        "Line 1: Writing strings to a file.\n",
        "Line 2: Using fputs() in C.\n",
        "Line 3: End of file.\n"
    };

```

```
    // Write each string to the file
```

```
    for (int i = 0; i < 3; i++) {
        if (fputs(lines[i], file) == EOF) {
            perror("Error writing to file");
            fclose(file);
            return 1;
        }
    }
```

```
}

printf("Strings written to the file successfully.\n");

// Close the file
fclose(file);

return 0;
}
```

5. writing records to the file using fwrite ,fprintf

```
//Read structure
#include <stdio.h>
#include <stdlib.h>

struct Record {
    int id;
    char name[50];
    float salary;
};

int main() {
    struct Record rec;
    FILE *file;

    // Writing records to a text file
    file = fopen("G:\\CProgram\\records.txt", "w+");
    if (file == NULL) {
        puts("Error opening file for writing");
        return 1;
    }
}
```

```
}
```

```
for (int i = 0; i < 3; i++) {  
    printf("Enter details for record %d:\n", i + 1);  
    printf("ID: ");  
    scanf("%d", &rec.id);  
    printf("Name: ");  
    scanf(" %[^\\n]", rec.name);  
    printf("Salary: ");  
    scanf("%f", &rec.salary);  
  
    // Write the record to the file  
    fprintf(file, "%d %s %.2f\\n", rec.id, rec.name, rec.salary);  
}  
fclose(file);
```

```
// Reading records from the text file  
file = fopen("G:\\CProgram\\records.txt", "r");  
if (file == NULL) {  
    perror("Error opening file for reading");  
    return 1;  
}
```

```
printf("\\nRecords in the file:\\n");  
while (fscanf(file, "%d %49s %f", &rec.id, rec.name, &rec.salary) == 3) {  
    printf("ID: %d, Name: %s, Salary: %.2f\\n", rec.id, rec.name, rec.salary);  
}
```

```
fclose(file);
```

```
return 0;
```

```
}
```