File Handling Functions

1. **fopen - Open File:**

   - **Description:** Opens a file with a specified mode (read, write, append, etc.).

   - **Syntax: FILE *fopen(const char *filename, const char *mode);**

   - **Example:**

     FILE *filePointer; filePointer = fopen("example.txt", "w");

2. **fclose - Close File:**

   - **Description:** Closes the specified file.

   - **Syntax: int fclose(FILE *stream);**

   - **Example:**

     fclose(filePointer);

3. **fprintf - Print to File:**

   - **Description:** Writes formatted output to the specified file.

   - **Syntax: int fprintf(FILE *stream, const char *format, ...);**

   - **Example:**

     fprintf(filePointer, "Hello, %s!\n", "World");

4. **fscanf - Read from File:**

   - **Description:** Reads formatted input from the specified file.

   - **Syntax: int fscanf(FILE *stream, const char *format, ...);**

   - **Example:**

     char buffer[50];

     fscanf(filePointer, "%s", buffer);

5. **fgetc - Get Character from File:**

   - **Description:** Reads a character from the specified file.

   - **Syntax: int fgetc(FILE *stream);**

   - **Example:**

     char ch = fgetc(filePointer);

6. **fputc - Put Character to File:**

- **Description:** Writes a character to the specified file.

- **Syntax: int fputc(int character, FILE *stream);**

- **Example:**

  fputc('A', filePointer);

7. **fgets - Get String from File:**

   - **Description:** Reads a line of text from the specified file.

   - **Syntax: char *fgets(char *str, int n, FILE *stream);**

   - **Example:**

     char buffer[100];

     fgets(buffer, sizeof(buffer), filePointer);

8. **fputs - Put String to File:**

   - **Description:** Writes a string to the specified file.

   - **Syntax: int fputs(const char *str, FILE *stream);**

   - **Example:**

     fputs("This is a sample string.", filePointer);

9. **rewind - Rewind File Position:**

   - **Description:** Sets the file position indicator to the beginning of the specified file.

   - **Syntax: void rewind(FILE *stream);**

   - **Example:**

     rewind(filePointer);

10. **feof - Test End-of-File:**

    - **Description:** Tests the end-of-file indicator for the specified file.

    - **Syntax: int feof(FILE *stream);**

    - **Example:**

      if (feof(filePointer)) { // End of file reached }

11. **fseek - Set File Position:**

    - **Description:** Sets the file position indicator for the specified file.

    - **Syntax: int fseek(FILE *stream, long offset, int origin);**

    - **Example:**

fseek(filePointer, 0, SEEK_SET); // Move to the beginning of the file

12. **ftell - Get File Position:**

- **Description:** Returns the current file position for the specified file.

- **Syntax: long ftell(FILE *stream);**

- **Example:**

long position = ftell(filePointer);

13. **rewind - Rewind File Position:**

- **Description:** Sets the file position indicator to the beginning of the specified file.

- **Syntax: void rewind(FILE *stream);**

- **Example:**

rewind(filePointer);

14. **remove - Remove File:**

- **Description:** Deletes the specified file.

- **Syntax: int remove(const char *filename);**

- **Example:**

remove("example.txt");