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24.Design a C program to demonstrate UNIX system calls for file management.

**Aim**

To write a C program that demonstrates the use of UNIX system calls for file management, including file creation, opening, reading, writing, and closing.

**Algorithm**

1. Start the program.
2. Use creat() or open() to create or open a file.
3. Write data to the file using write().
4. Close the file using close().
5. Reopen the file using open() in read mode.
6. Read data from the file using read().
7. Display the read data on the console.
8. Close the file.
9. End the program.

**Procedure**

1. Import necessary headers (like fcntl.h and unistd.h).
2. Define the file name and data to write.
3. Use creat() or open() to create/open a file.
4. Use write() to write data into the file.
5. Close the file using close().
6. Use open() to reopen the file in read mode.
7. Use read() to read the data from the file into a buffer.
8. Display the content read from the file.
9. Close the file using close().

**Code:**

#include <fcntl.h>

#include <unistd.h>

#include <stdio.h>

int main() {

int fd;

char buffer[100];

const char \*data = "Hello, UNIX file management!";

fd = creat("example.txt", 0644);

write(fd, data, 27);

close(fd);

fd = open("example.txt", O\_RDONLY);

read(fd, buffer, 27);

buffer[27] = '\0';

printf("Read data: %s\n", buffer);

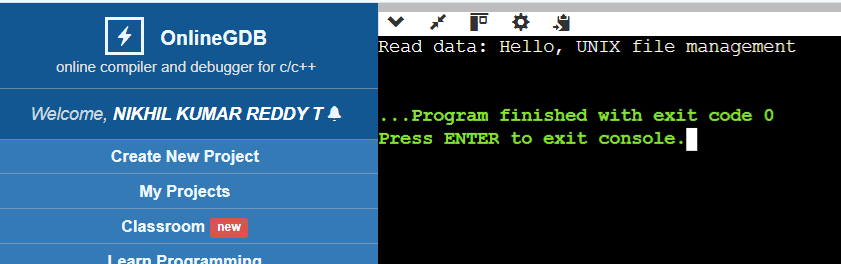
close(fd);

return 0;

}

### ****Result****

The program demonstrates the creation, writing, reading, and closing of a file using UNIX system calls. When executed, the content of the file ("Hello, UNIX file management!") is read and displayed on the console.

**Output:**