

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

Aim:

To demonstrate the use of UNIX system calls for file management, including opening, reading, writing, and closing files.

Procedure:

1. Create or Open a File: Use the open() system call to create or open a file.
2. Write to the File: Use the write() system call to write data to the file.
3. Read from the File: Use the read() system call to read data from the file.
4. Close the File: Use the close() system call to close the file.

C Code:

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

```
#include <fcntl.h>
```

```
#include <unistd.h>
```

```
int main() {
```

```
    int fd;
```

```
    char buffer[100];
```

```
    fd = open("example.txt", O_CREAT | O_WRONLY, 0644);
```

```
    if (fd == -1) {
```

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

```
        return 1;
```

```
    }
```

```
    write(fd, "Hello, UNIX system calls!", 25);
```

```
    close(fd);
```

```
fd = open("example.txt", O_RDONLY);

if (fd == -1) {
    perror("Error opening file");
    return 1;
}

read(fd, buffer, sizeof(buffer));

printf("Content of file: %s\n", buffer);

close(fd);

return 0;
}
```

Output:

Output

```
Content of file: Hello, UNIX system calls!
```