#include <stdio.h>

#include <stdlib.h>

#include <fcntl.h>

#include <unistd.h>

#include <string.h>

int main() {

int fd;

char buffer[100];

// Create a new file (or open if it exists) with read and write permissions

fd = open("example.txt", O\_CREAT | O\_RDWR, 0644);

if (fd == -1) {

perror("Error opening file");

exit(EXIT\_FAILURE);

}

// Write data to the file

const char \*data = "Hello, UNIX system calls!";

ssize\_t bytes\_written = write(fd, data, strlen(data));

if (bytes\_written == -1) {

perror("Error writing to file");

close(fd);

exit(EXIT\_FAILURE);

}

// Move the file offset to the beginning of the file

if (lseek(fd, 0, SEEK\_SET) == -1) {

perror("Error seeking in file");

close(fd);

exit(EXIT\_FAILURE);

}

// Read data from the file

ssize\_t bytes\_read = read(fd, buffer, sizeof(buffer) - 1);

if (bytes\_read == -1) {

perror("Error reading from file");

close(fd);

exit(EXIT\_FAILURE);

}

// Null-terminate the buffer and print the data

buffer[bytes\_read] = '\0';

printf("Data read from file: %s\n", buffer);

// Close the file

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

perror("Error closing file");

exit(EXIT\_FAILURE);

}

return 0;

}

Output:

Data read from file: Hello, UNIX system calls!