

CODE:2 COPY CONTENTS OF ONE FILE TO ANOTHER USING SYSTEMS CALLS USING C PROGRAM

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#include <fcntl.h>

#include <unistd.h>

#include <stdio.h>

#include <stdlib.h>


#define BUFFER_SIZE 1024


int main(int argc, char *argv[]) {

    int source_fd, dest_fd;

    ssize_t bytes_read, bytes_written;

    char buffer[BUFFER_SIZE];


    // Check command-line arguments

    if (argc != 3) {

        write(2, "Usage: ./copy <source_file> <destination_file>\n", 48);

        exit(1);

    }


    // Open source file

    source_fd = open(argv[1], O_RDONLY);

    if (source_fd < 0) {

        perror("Error opening source file");

        exit(1);

    }
```

```
// Open/create destination file with write permissions
dest_fd = open(argv[2], O_WRONLY | O_CREAT | O_TRUNC, 0644);
if (dest_fd < 0) {
    perror("Error opening/creating destination file");
    close(source_fd);
    exit(1);
}

// Read from source and write to destination
while ((bytes_read = read(source_fd, buffer, BUFFER_SIZE)) > 0) {
    bytes_written = write(dest_fd, buffer, bytes_read);
    if (bytes_written != bytes_read) {
        perror("Error writing to destination file");
        close(source_fd);
        close(dest_fd);
        exit(1);
    }
}

if (bytes_read < 0) {
    perror("Error reading source file");
}

// Close files
close(source_fd);
close(dest_fd);
```

```
write(1, "File copied successfully.\n", 27);
```

```
return 0;
```

```
}
```