EXPERIMENT-2

2.Identify the system calls to copy the content of one file to another and illustrate the same using

a C program.

#include <stdio.h>

#include <fcntl.h>

#include <unistd.h>

#include <stdlib.h>

#define BUFFER\_SIZE 1024

int main() {

int sourceFile, destFile;

ssize\_t bytesRead, bytesWritten;

char buffer[BUFFER\_SIZE];

sourceFile = open("source.txt", O\_RDONLY);

if (sourceFile < 0) {

perror("Error opening source file");

exit(1);

}

destFile = open("destination.txt", O\_WRONLY | O\_CREAT | O\_TRUNC, 0644);

if (destFile < 0) {

perror("Error opening/creating destination file");

close(sourceFile);

exit(1);

}

while ((bytesRead = read(sourceFile, buffer, BUFFER\_SIZE)) > 0) {

bytesWritten = write(destFile, buffer, bytesRead);

if (bytesWritten != bytesRead) {

perror("Error writing to destination file");

close(sourceFile);

close(destFile);

exit(1);

}

}

close(sourceFile);

close(destFile);

printf("File copied successfully using system calls.\n");

return 0;

}