Lab 14

1.

```c
#include <stdio.h>
#include <stdlib.h>
#include <fcntl.h>
#include <unistd.h>


int main(int argc, char *argv[]) {
    int BUFFER_SIZE=1024;
    int src, dest;
    char buffer[BUFFER_SIZE];
    ssize_t bytes;

    if (argc != 3) {
        fprintf(stderr, "Usage: %s <source> <destination>\n", argv[0]);
        exit(EXIT_FAILURE);
    }

    src = open(argv[1], O_RDONLY);
    if (src == -1) {
        perror("Error opening source file");
        exit(EXIT_FAILURE);
    }

    dest = open(argv[2], O_WRONLY | O_CREAT | O_TRUNC, 0644);
    if (dest == -1) {
        perror("Error opening destination file");
        close(src);
        exit(EXIT_FAILURE);
    }

    while ((bytes = read(src, buffer, BUFFER_SIZE)) > 0) {
        if (write(dest, buffer, bytes) != bytes) {
            perror("Error writing to destination file");
            close(src);
            close(dest);
            exit(EXIT_FAILURE);
        }
    }

    if (bytes == -1) {
        perror("Error reading source file");
    }

    close(src);
    close(dest);

    return 0;
}
```

```
~/l/test1 ls
a.txt  b.txt  test/
~/l/test1 arincp a.txt c.txt
~/l/test1 ls
a.txt  b.txt  c.txt  test/
```

2.

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

int main(int argc, char *argv[]) {
    if (argc ≠ 3) {
        fprintf(stderr, "Usage: %s <oldname> <newname>\n", argv[0]);
        exit(EXIT_FAILURE);
    }

    if (rename(argv[1], argv[2]) ≠ 0) {
        perror("Error renaming file");
        exit(EXIT_FAILURE);
    }

    return 0;
}
```

```
~/l/test1  arinrename test test2
~/l/test1  ls
test2/
```