

```
1  #include <sys/types.h>    /* include necessary header files */
2  #include <fcntl.h>
3  #include <stdlib.h>
4  #include <unistd.h>
5
6  #define BUF_SIZE 4096     /* use a buffer size of 4096 bytes */
7  #define OUTPUT_MODE 0700 /* protection bits for output file */
8
9  int main(int argc, char *argv[])
10 {
11     int in, out, rbytes, wbytes;
12     char buf[BUF_SIZE];
13
14     if (argc != 3) exit(1);
15
16     if ( (in = open(argv[1], O_RDONLY)) < 0 ) exit(2); /* open source file */
17
18     if ( (out = creat(argv[2], OUTPUT_MODE)) < 0 ) exit(3); /* create destination file */
19
20     while (1) { /* Copy loop */
21         if ( (rbytes = read(in, buf, BUF_SIZE)) <= 0 ) break; /* read a block of data */
22         if ( (wbytes = write(out, buf, rbytes)) <= 0 ) exit(4); /* write data */
23     }
24
25     close(in);
26     close(out);
27     if (rbytes == 0) exit(0); /* no error on last read */
28     else exit(5);           /* error on last read */
29 }
```