

```

1 // reducto.c -- reduces your files by two-thirds!
2 #include <stdio.h>
3 #include <stdlib.h>    // for exit()
4 #include <string.h>    // for strcpy(), strcat()
5 #define LEN 40
6
7 int main(int argc, char *argv[])
8 {
9     FILE *in, *out;    // declare two FILE pointers
10    int ch;
11    char name[LEN];    // storage for output filename
12    int count = 0;
13
14    // check for command-line arguments
15    if (argc < 2)
16    {
17        fprintf(stderr, "Usage: %s filename\n", argv[0]);
18        exit(1);
19    }
20    // set up input
21    if ((in = fopen(argv[1], "r")) == NULL)
22    {
23        fprintf(stderr, "I couldn't open the file \"%s\"\n", argv[1]);
24        exit(2);
25    }
26    // set up output
27    strcpy(name, argv[1], LEN - 5); // copy filename
28    name[LEN - 5] = '\0';
29    strcat(name, ".red");           // append .red
30    if ((out = fopen(name, "w")) == NULL)
31    {
32        // open file for writing
33        fprintf(stderr, "Can't create output file.\n");
34        exit(3);
35    }
36    // copy data
37    while ((ch = getc(in)) != EOF)
38        if (count++ % 3 == 0)
39            putc(ch, out); // print every 3rd char
40    // clean up
41    if (fclose(in) != 0 || fclose(out) != 0)
42        fprintf(stderr, "Error in closing files\n");
43
44    return 0;
45 }

```