Assignment 6 Problem 1 E

(Otherwise known as: Chapter 10 Problem 1)

Description:

1. The program cp.c makes a copy of a file. It uses getc() and putc() to do

the input and output. Write four new versions of a file copy program. Each of

the programs should have the same functionality as cp.c.

E. Compare the sizes of the object code from all five versions of the file copy

programs. If facilities for testing execution efficiency are available on your

system, test the efficiency of each version. Report your findings.

I individually measured the sizes of the object code for each program. From my understanding, the object code of a program is the file created by the compiler after the source code is compiled.

cp.c 439.969 KB

cpA.c 439.937 KB

cpB.c 440.477 KB

cpC.c 440.5 KB

cpD.c 451.509 KB

From the results, it’s clear that the size of the object code increases as we use some of the more complex function to create the same file copy program.

Unfortunately, I couldn’t find a way to measure the efficiency of the code in a timely manner.