Assignment 4 (y86emul)

My y86emul.c program takes the argument, which is a file, and fetches, decodes, and executes the instructions contained in it. In the main, the file is read, and based on the directives, the contents of the file are stored in different indexes of the memory array (some sequential, some non-sequential). The fetch() function retrieves the current instruction. Inside it, the decode() function is called. It contains a switch statement, with a case for each opcode. An execute() function, based on the opcode of the instruction, is then called on the byte holding it. When all of the instructions have been fetched, decoded, and executed, the program performs some action, and then ends (with the exception of some programs, which may require a certain input in order to halt).