

Task #1

Your task is to modify the guests program in Project 9 so the program is split into two source files and one header file. In this project, you are allowed to modify all parts of the program.

- Put all functions related to operations on the list of guests into volunteer.c
- Create a header file named volunteer.h that contains struct volunteer declaration and prototypes for the functions in volunteer.c. The header file should enclose the contents of the header file in an `#ifndef-#endif` pair to protect the file.
- Put read_line function in read_line.c
- Create a header file named read_line.h that contains function prototype for read_line function. The header file should enclose the contents of the header file in an `#ifndef-#endif` pair to protect the file.
- project10_volunteer.c contains the main function.
- Include appropriate header files in the source files.

Task #2

Write a makefile to build the program on the **student cluster**. The file should be named "makefile".

The makefile should contain the following rules:

- Build volunteer.o by compiling volunteer.c
- Build read_line.o by compiling read_line.c
- Build project10_volunteer.o by compiling project10_volunteer.c
- Build project10_volunteer by linking volunteer.o read_line.o, and project10_volunteer.o

Each rule should include the name of the target file, dependencies among files, and the command to be executed. The makefile should name the executable file for the program project10_volunteer.