

Assignment 125: Write a program to quit the program if it traps the SIGQUIT signal so we can terminate our program?

To terminate the program when it traps the SIGQUIT signal, you can modify the sigterm_handler function to call the exit function when the SIGQUIT signal is caught. Here's an example:

```
#include <signal.h>
#include <stdio.h>

void sigquit_handler(int sig) {
    printf("SIGQUIT signal caught. Terminating the program...\n");
    // Perform necessary cleanup or save state here
    exit(0);
}

void sigterm_handler(int sig) {
    printf("SIGTERM signal caught. Ignoring and continuing...\n");
}

int main() {
    // Register signal handlers
    signal(SIGINT, sigint_handler);
    signal(SIGTERM, sigterm_handler);
    signal(SIGQUIT, sigquit_handler);

    // Your program's main logic here
    // ...

    return 0;
}
```

In this example, we define a new signal handler function sigquit_handler for the SIGQUIT signal. Inside this function, we print a message indicating that a SIGQUIT signal has been caught and then call the exit function to terminate the program.

In the sigterm_handler function, we now print a message indicating that the SIGTERM signal has been caught and choose to ignore it by continuing the program execution instead of terminating it.

You can replace the placeholder comments with your own cleanup or save state logic as needed.