```c
/******************** init.c file ****************/
#include "ucode.c"
int console;
int parent() // P1's code
{
        int pid, status;
        while(1){
                printf("Yuzhu's INIT : wait for ZOMBIE child\n");
                pid = wait(&status);
                if (pid==console){
                // if console login process died
                        printf("Yuzhu's INIT: forks a new console login\n");
                        console = fork(); // fork another one
                        if (console)
                                continue;
                        else
                                exec("login /dev/tty0"); // new console login process
                }//end outer if
                printf("Yuzhu's INIT: I just buried an orphan child proc %d\n", pid);
        }
}

int main()
{
        int in, out; // file descriptors for terminal I/O
        in = open("/dev/tty0", O_RDONLY); // file descriptor 0
        out = open("/dev/tty0", O_WRONLY); // for display to console
        printf("Yuzhu's INIT : fork a login proc on console\n");

        console = fork();

        if (console) // parent
                parent();
        else // child: exec to login on tty0
        {
                printf("Child running login\n");
                exec("login /dev/tty0");
        }
}
```