CS344: Operating Systems Lab
Assignment 1

Ritish Bansal
190101076

August 20, 2021

Exercise 1

I have edited following files:

1. **sys_proc.c**: Here in this I have created a function int sys_draw(void). As given in question that if buffer is too small returns a negative value i.e. -1. If all the conditions are full filled then it returns number of bytes copied to buffer.

2. **syscall.h**: Assign new number to system call. Here there were 21 system calls so I have added this system call as number 22.

3. **user.h**: Here I have added function prototype as int draw(void*, unit).

4. **usys.S**: Here I have added a system call as SYSCALL(draw).

5. **syscall.c**: Here I have added extern int sys_draw(void) so that function is visible to program. It also contains array of system calls and I have added our system call as [SYS_draw] sys_draw.

Exercise 2
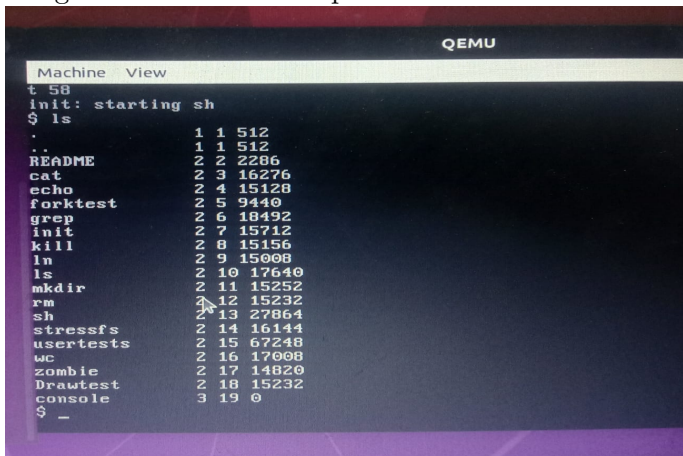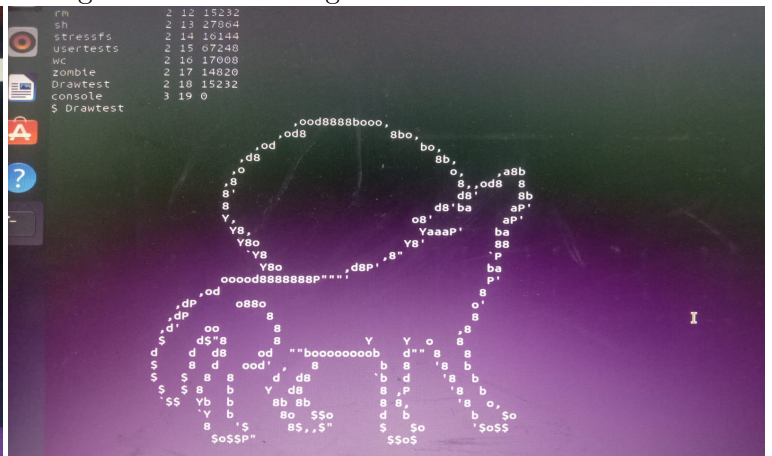
Image 1: ls command in qemu

Image 2: Drawtest Image

Here I have created a file named Drawtest.c which include user,types and stat header files and here I have taken size of buffer and then call the function draw to print test image to console.

In this process Makefile is also edited as Drawtest must be present to xv6 code for compilation. I have just included _Drawtest\ in UPROGS.