

Q1. Add a new system call named `getuptime()` that allows a user program to obtain the number of ticks since boot. You must implement a new system call: `int getuptime(void);` This system call, when invoked from a user program, should return the current value of ticks.

Q2. Add a mechanism so that when a user process runs with tracing enabled, the kernel prints every system call it invokes, along with its return value.

```
$> strace ls
1: syscall exec -> 0
1: syscall open -> 3
1: syscall read -> 64
1: syscall write -> 64
1: syscall close -> 0
```

Steps:

- Add a trace flag inside the process structure.
- Create a `trace()` system call that sets this flag for the current process.
- Modify the `syscall dispatcher` to print `syscall info` if tracing is active.
- Create a user program “strace” that runs a command under tracing.

NOTE: You might have to create name mappings for some of them. [We can list down the ones we will evaluate for, and name mapping for them can be created]