

**1. Names of the students:** Priyanshu Jain, Sayali Patil, Shadi Davari

**2. Output:**

```
Current UID: 1894915
Error: setuid failed! Reason: Operation not permitted
Changed UID: 1894915
```

**3. Output:**

```
Current UID: 1000
Error: setuid failed! Reason: Operation not permitted
Changed UID: 1000
```

**Difference:** Not much difference other than the fact that the UID was 1000 in raspberry pi instead of the longer UID on the linux lab.

**4. Output:**

```
Current UID: 1000
Error: setuid failed! Reason: Operation not permitted
Changed UID: 1000
```

**5. Function Prototypes:**

```
asmlinkage int new_func1(void);
asmlinkage int new_func2(int singleArg);
```

**6. Implementation of a single argument function:**

```
#include <linux/kernel.h>
#include <linux/init.h>
#include <linux/sched.h>
#include <linux/syscalls.h>

SYSCALL_DEFINE1( new_func2, int, singleArg ){
    printk("Value of parameter passed: %d\n", singleArg);
    return 0;
}
```

**7. Newly modified line of Makefile:**

```
stacktrace.o sys_arm.o time.o traps.o sys_new_func1.o sys_new_func2.o
```

**8. Changes added to the syscall.tbl file:**

```
398 common new_func1 sys_new_func1  
399 common new_func2 sys_new_func2
```

**9. Output produced by uname -a:**

```
Linux pikachan 4.14.62-v7priyanshustudio3 #4 SMP PREEMPT Fri Sep 13 13:40:37  
CDT 2019 armv7l GNU/Linux
```

**10. System message log:**

```
[ 964.206235] Someone invoked the sys_noargs system call  
[ 964.206756] Someone invoked the sys_noargs system call  
[ 964.206866] Value of parameter passed: 0
```