

**UBUNTU COMMANDS**

**OPERATING SYSTEMS LABS**



**LAB TASK #06**

*Submitted By*

**AITZAZ TAHIR CH**

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*Submitted to*

**MR. MUHAMMAD ABDULLAH**

**(COMPUTER INSTRUCTOR)**

**DEPARTMENT OF COMPUTER SCIENCE  
FAST NATIONAL UNIVERSITY OF  
COMPUTER AND EMERGING SCIENCES,  
PESHAWAR**

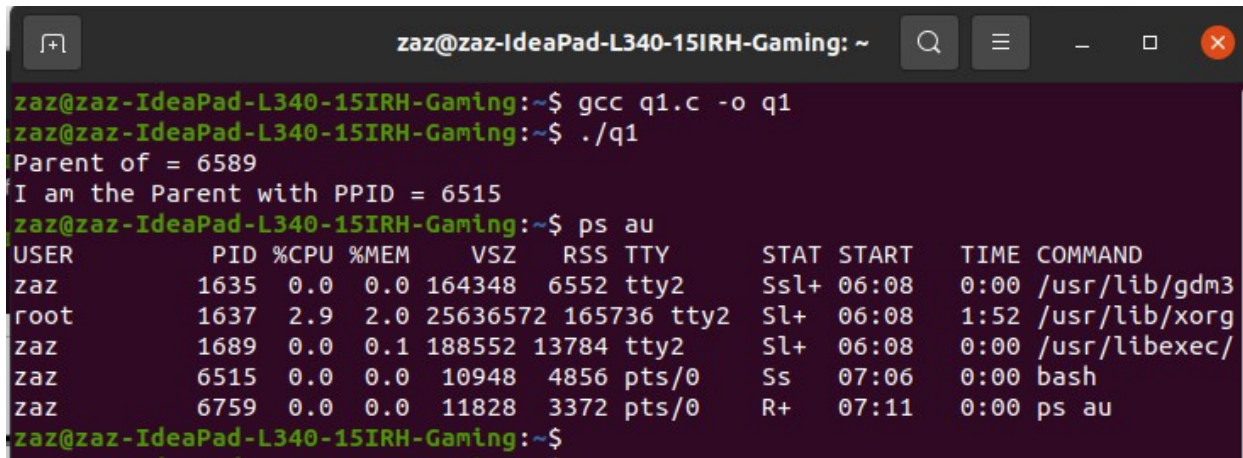
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## Q No.1:

### C code:

```
#include <unistd.h>
#include <stdio.h>
#include<signal.h>
#include <sys/types.h>
int main()
{
int pid;
pid = fork();
if(pid == 0)
{
printf("Child PID = %d\n", pid);
printf("I am the Child with PID = %d\n", getpid());
}
else
{
printf("Parent of = %d\n", pid);
printf("I am the Parent with PPID = %d\n",getppid());
kill(pid,SIGTERM);
sleep(120);
}
}
```

## Output:



```
zaz@zaz-IdeaPad-L340-15IRH-Gaming: ~  
zaz@zaz-IdeaPad-L340-15IRH-Gaming:~$ gcc q1.c -o q1  
zaz@zaz-IdeaPad-L340-15IRH-Gaming:~$ ./q1  
Parent of = 6589  
I am the Parent with PPID = 6515  
zaz@zaz-IdeaPad-L340-15IRH-Gaming:~$ ps au  
USER          PID %CPU %MEM    VSZ   RSS TTY      STAT START   TIME COMMAND  
zaz           1635  0.0  0.0 164348  6552 tty2      Ssl+  06:08   0:00 /usr/lib/gdm3  
root          1637  2.9  2.0 25636572 165736 tty2      Sl+   06:08   1:52 /usr/lib/xorg  
zaz           1689  0.0  0.1 188552 13784 tty2      Sl+   06:08   0:00 /usr/libexec/  
zaz           6515  0.0  0.0 10948   4856 pts/0     Ss    07:06   0:00 bash  
zaz           6759  0.0  0.0 11828   3372 pts/0     R+    07:11   0:00 ps au  
zaz@zaz-IdeaPad-L340-15IRH-Gaming:~$
```

## Q No.2:

### C code:

```
#include <unistd.h>  
#include <stdio.h>  
#include <signal.h>  
#include <sys/types.h>  
#include <sys/wait.h>  
  
int main()  
{  
    int pid;  
    pid = fork();  
    if(pid == 0)  
    {  
        printf("Child PID = %d\n", pid);  
        printf("I am the Child with PID = %d\n", getpid());  
        kill(getppid(),SIGTERM);  
        sleep(120);  
    }
```

```

}
else
{
wait(NULL);
printf("Parent of = %d\n", pid);
printf("I am the Parent with PPID = %d\n",getppid());
}
}

```

## Output:

```

zaz@zaz-IdeaPad-L340-15IRH-Gaming: ~
zaz@zaz-IdeaPad-L340-15IRH-Gaming:~$ gcc q2.c -o q2
zaz@zaz-IdeaPad-L340-15IRH-Gaming:~$ ./q2
Child PID = 0
I am the Child with PID = 6935
Terminated
zaz@zaz-IdeaPad-L340-15IRH-Gaming:~$ ps au
USER      PID %CPU %MEM    VSZ   RSS TTY      STAT START   TIME COMMAND
zaz        1635  0.0  0.0 164348  6552 tty2    Ssl+  06:08   0:00 /usr/lib/gdm3
root       1637  3.1  2.1 25636572 174152 tty2    Sl+   06:08   2:06 /usr/lib/xorg
zaz        1689  0.0  0.1 188552 13784 tty2    Sl+   06:08   0:00 /usr/libexec/
zaz        6515  0.0  0.0 10948  4864 pts/0    Ss    07:06   0:00 bash
zaz        6935  0.0  0.0   2488    76 pts/0    S     07:16   0:00 ./q2
zaz        6936  0.0  0.0 11828  3268 pts/0    R+    07:16   0:00 ps au
zaz@zaz-IdeaPad-L340-15IRH-Gaming:~$ ps au
USER      PID %CPU %MEM    VSZ   RSS TTY      STAT START   TIME COMMAND
zaz        1635  0.0  0.0 164348  6552 tty2    Ssl+  06:08   0:00 /usr/lib/gdm3
root       1637  3.0  2.1 25636572 174160 tty2    Sl+   06:08   2:14 /usr/lib/xorg
zaz        1689  0.0  0.1 188552 13784 tty2    Sl+   06:08   0:00 /usr/libexec/
zaz        6515  0.0  0.0 10948  4864 pts/0    Ss    07:06   0:00 bash
zaz        7217  0.0  0.0 11828  3268 pts/0    R+    07:21   0:00 ps au
zaz@zaz-IdeaPad-L340-15IRH-Gaming:~$ 

```