

Operating Systems Lab Report

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Lab 8: Operating Systems

0.1 Open 2 Terminals

Opening two terminals checking the process id and then

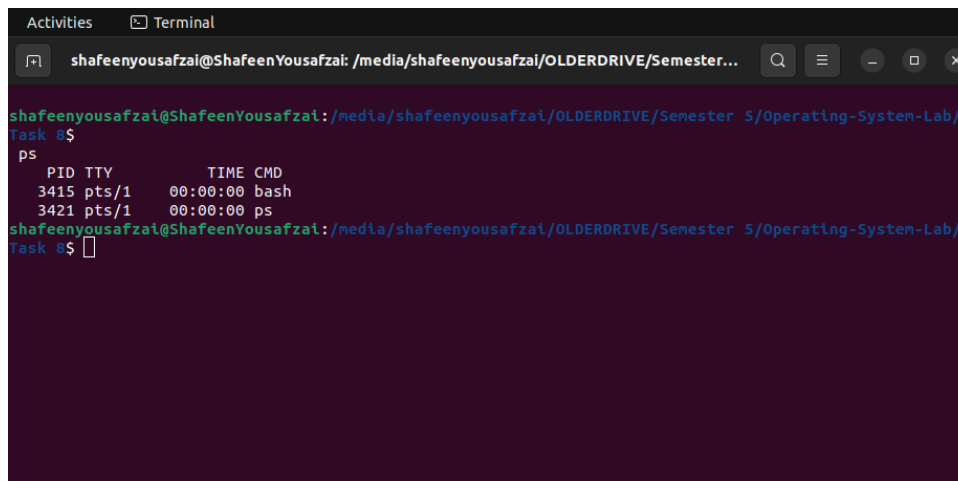
A terminal window titled 'Terminal' showing the command 'ps' and its output. The output is a table with columns: PID, TTY, TIME, and CMD. The first row shows PID 3415, TTY pts/1, TIME 00:00:00, and CMD bash. The second row shows PID 3421, TTY pts/1, TIME 00:00:00, and CMD ps. The terminal prompt is 'shafeenyousafzal@ShafeenYousafzal: /media/shafeenyousafzal/OLDERDRIVE/Semester 5/Operating-System-Lab/Task 8\$'.

Figure 1: Checking the process id by using PS

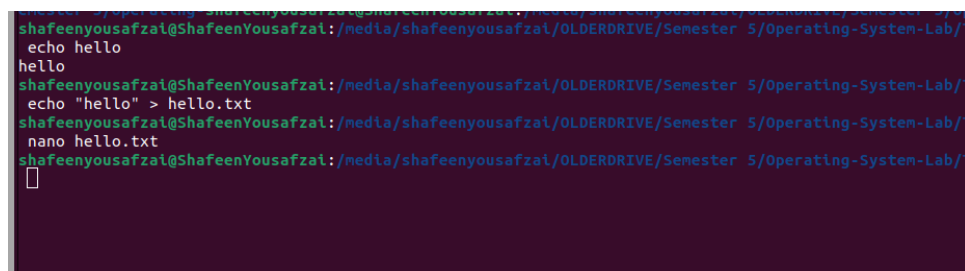
A terminal window showing the command 'echo hello' and its output 'hello'. Then, the command 'echo "hello" > hello.txt' is entered, followed by 'nano hello.txt'. The terminal prompt is 'shafeenyousafzal@ShafeenYousafzal: /media/shafeenyousafzal/OLDERDRIVE/Semester 5/Operating-System-Lab/Task 8\$'.

Figure 2: Outputting hello on terminal using cat ;

```

shafeenyousafzal@ShafeenYousafzal:/media/shafeenyousafzal/OLDERDRIVE/Semester 5/Operating-System-Lab/T
echo "hello" > /proc/3415/fd/1
shafeenyousafzal@ShafeenYousafzal:/media/shafeenyousafzal/OLDERDRIVE/Semester 5/Operating-System-Lab/T
nan

```

Figure 3: Outputting hello on the proces id termianl

```

3421 pts/1 00:00:00 ps
shafeenyousafzal@ShafeenYousafzal:/media/shafeenyousafzal/OLDERDRIVE/Semester 5/Operating-S
Task 8$ hello

```

Figure 4: Outputting hello on temrinal using cat ;

```

shafeenyousafzal@ShafeenYousafzal:/media/shafeenyousafzal/OLDERDRIVE/Semester 5/
Operating-System-Lab/Task 8$ ps
PID TTY TIME CMD
3033 pts/1 00:00:00 bash
3185 pts/1 00:00:00 ps
shafeenyousafzal@ShafeenYousafzal:/media/shafeenyousafzal/OLDERDRIVE/Semester 5/
Operating-System-Lab/Task 8$ Muhammad Shaheen
22P-9278
BS-AI

shafeenyousafzal@ShafeenYousafzal:/media/shafeenyousafzal/OLDERDRIVE/Semester 5/
Operating-System-Lab/Task 8$ echo "Muhammad Shaheen"
Muhammad Shaheen
22P-9278
BS-AI
shafeenyousafzal@ShafeenYousafzal:/media/shafeenyousafzal/OLDERDRIVE/Semester 5/
Operating-System-Lab/Task 8$ echo "Muhammad Shaheen"
Muhammad Shaheen
22P-9278
BS-AI" > /proc/3033/fd/1
shafeenyousafzal@ShafeenYousafzal:/media/shafeenyousafzal/OLDERDRIVE/Semester 5/
Operating-System-Lab/Task 8$

```

Figure 5: Outputting Name,Roll,section

0.2 Run code and check file size

```

#include <fcntl.h>
#include <stdio.h>
#include <sys/stat.h>
#include <sys/types.h>
#include <unistd.h>
int main(int argc, char* argv[])
{
char *path = argv[1];
int fd = open(path, O_WRONLY | O_EXCL |
O_CREAT);
if (fd == -1)
{
printf("Error: File not Created\n");
return 1;
}

```

```
}  
return 0;  
}
```