

**UBUNTU COMMANDS**

**OPERATING SYSTEMS LABS**



**LAB TASK #10**

*Submitted By*

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**(19P-0012)**

*Submitted to*

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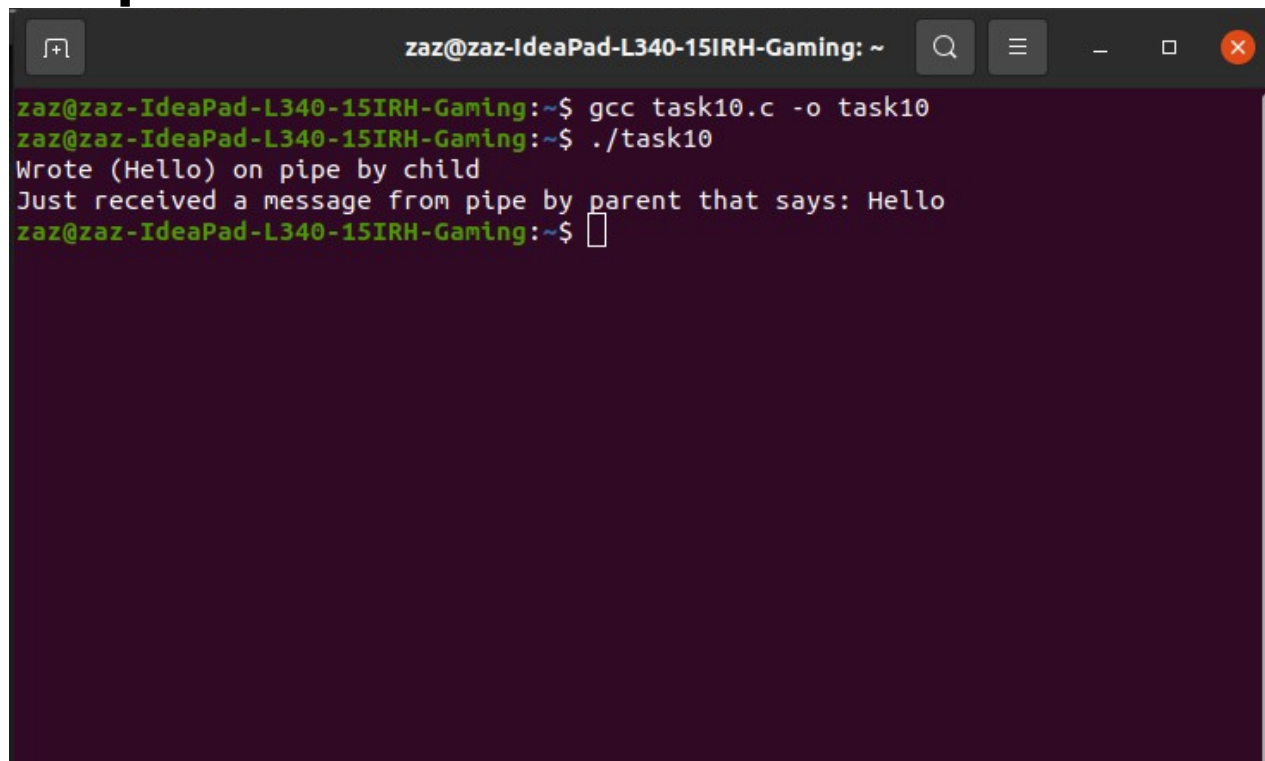
**Session 2019-2023**

## Q No.1:

### C code:

```
#include<unistd.h>
#include <stdio.h>
#include <stdlib.h>
int main()
{
int pid; // for storing fork() return
int pfd[2]; // for pipe file descriptors
char aString[20]; // Temporary storage
pipe(pfd); // create our pipe
pid = fork(); // create child process
if (pid == 0) // For child
{
close(pfd[0]); // Closing reading from pipe
write(pfd[1], "Hello", 5); // Write onto pipe
printf("Wrote (Hello) on pipe by child \n");
}
else // For parent
{
close(pfd[1]); // Closing writing on pipe
read(pfd[0], aString, 5); // Read from pipe
printf("Just received a message from pipe by parent that says: %s\n",aString);
}
}
```

## Output:



```
zaz@zaz-IdeaPad-L340-15IRH-Gaming: ~  
zaz@zaz-IdeaPad-L340-15IRH-Gaming:~$ gcc task10.c -o task10  
zaz@zaz-IdeaPad-L340-15IRH-Gaming:~$ ./task10  
Wrote (Hello) on pipe by child  
Just received a message from pipe by parent that says: Hello  
zaz@zaz-IdeaPad-L340-15IRH-Gaming:~$
```

The image shows a terminal window with a dark purple background. The window title is "zaz@zaz-IdeaPad-L340-15IRH-Gaming: ~". The terminal displays the following commands and output:

- Command: `gcc task10.c -o task10`
- Command: `./task10`
- Output: `Wrote (Hello) on pipe by child`
- Output: `Just received a message from pipe by parent that says: Hello`
- Command: `zaz@zaz-IdeaPad-L340-15IRH-Gaming:~$`