Lab Tasks

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Submitted to: Ma’am Kausar

Subject: Operating System

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BSCS SEMESTER – 5

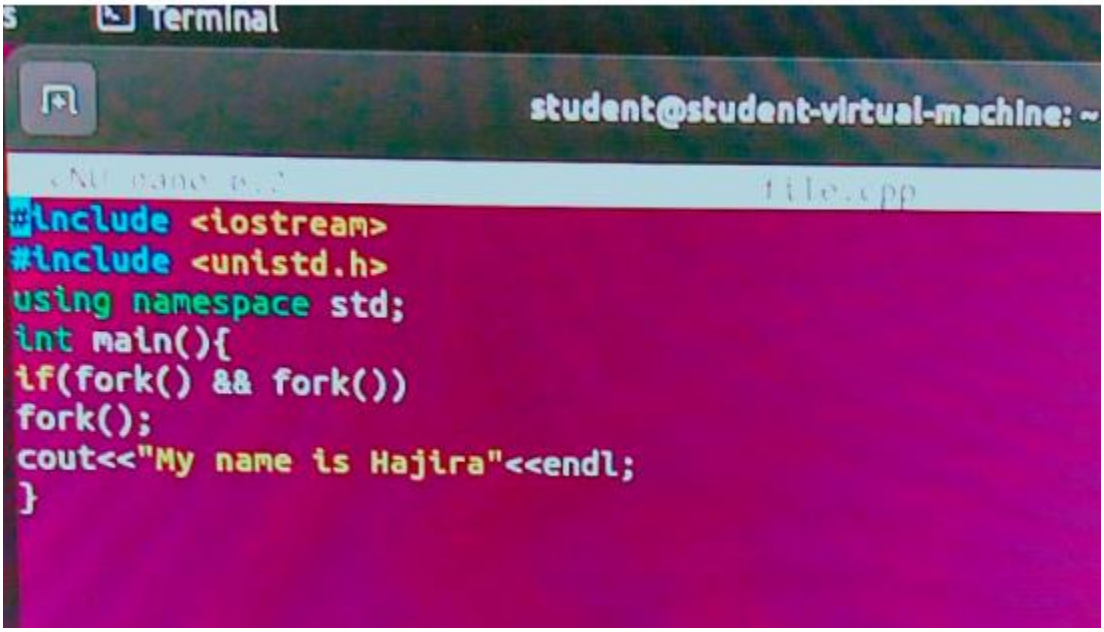
RIPHAH INTERNATIONAL UNIVERSITY

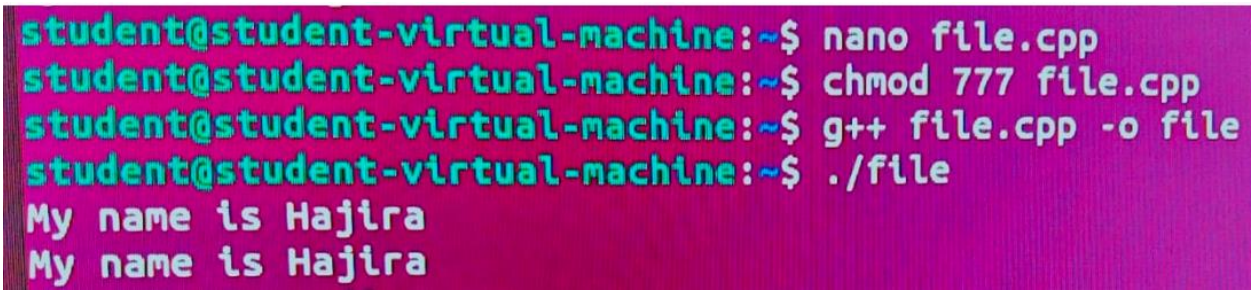
ISLAMABAD, PAKISTAN

Tasks

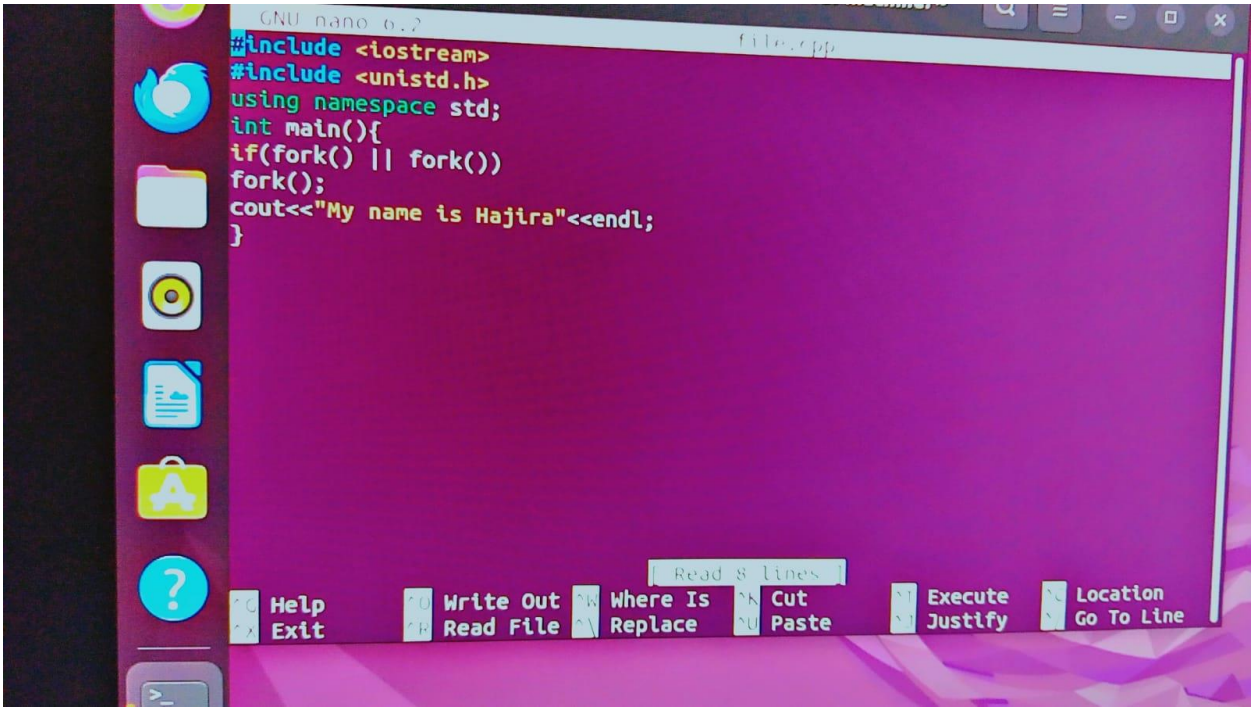
The Fork system call is used for creating a new process in Linux, and Unix systems, which is called the child process, which runs concurrently with the process that makes the fork() call (parent process). After a new child process is created, both processes will execute the next instruction following the fork() system call. Now here in this case we use conditional statement or AND operator.

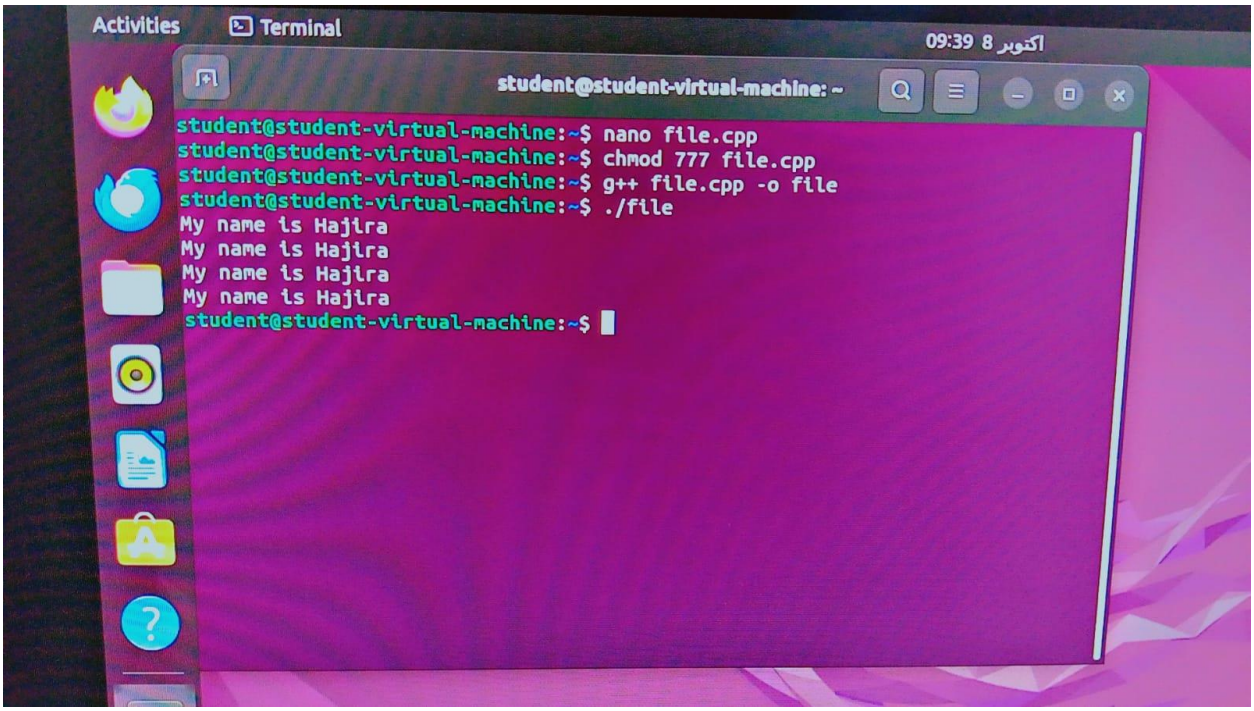
If both conditions are true then it will proceed further. Code executes parent and child occur parent receives positive value and child receive negative. After the parent, two more processes generate the child and parent now from parent to parent we have 1 then statement execute on the other hand again process creates parent and child the second time execute.

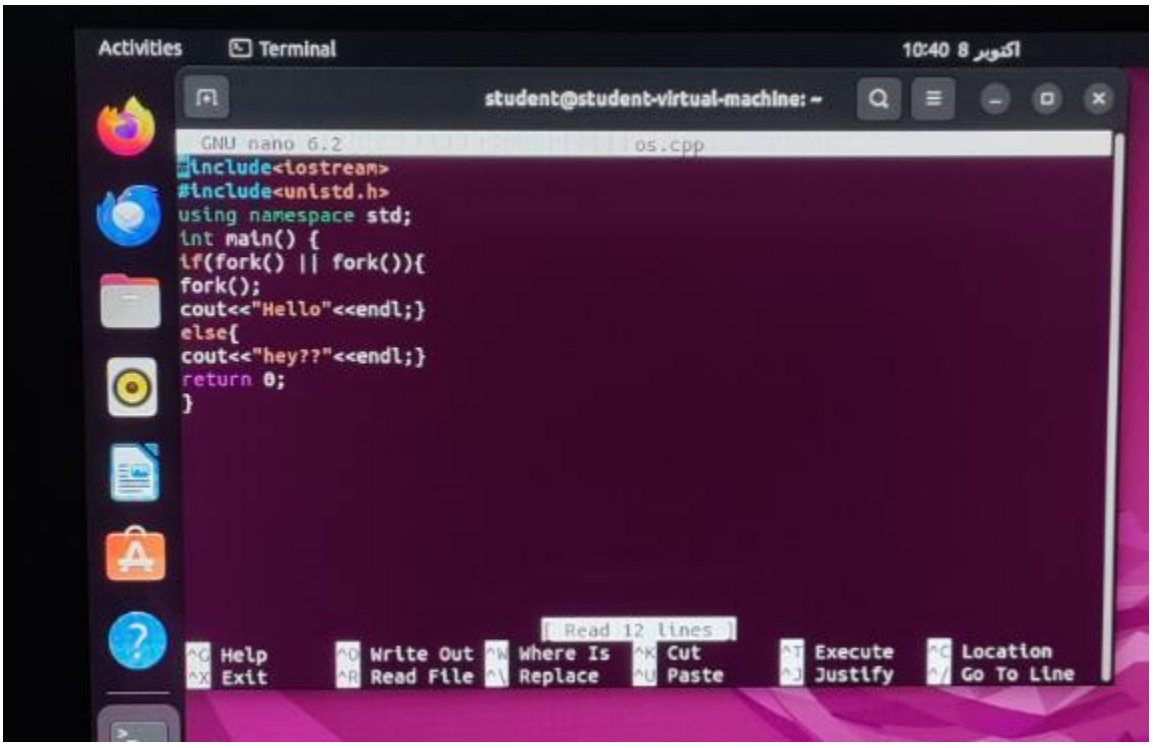


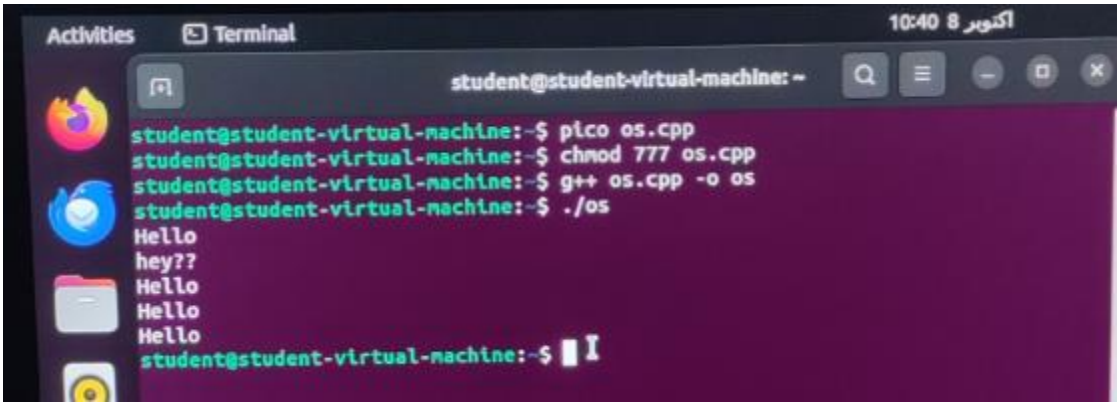


In the OR operator if any of one is true, the result will be true then it will proceed. The first fork creates child (0) and parent (1). The second fork is called for both Parent (1) and child (1). Then Parent (1) will be divided into Child (0) and Parent (1) and Child (1) will be divided into Child (0), and Child (0). One condition in child (1) is true (0+1=true). It will further divide into Child (0) and Child (0) this is the last call of fork. In this way 4 times My name is Hajira is printed.




Activities
Terminal
09:39 8 اكتوبر
student@student-virtual-machine: ~
student@student-virtual-machine:~$ nano file.cpp
student@student-virtual-machine:~$ chmod 777 file.cpp
student@student-virtual-machine:~$ g++ file.cpp -o file
student@student-virtual-machine:~$ ./file
My name is Hajira
My name is Hajira
My name is Hajira
My name is Hajira
student@student-virtual-machine:~$


Activities
Terminal
10:40 8 اكتوبر
student@student-virtual-machine: ~
GNU nano 6.2
os.cpp
#include<iostream>
#include<unistd.h>
using namespace std;
int main() {
if(fork() || fork()){
fork();
cout<<"Hello"<<endl;}
else{
cout<<"hey??"<<endl;}
return 0;
}
[Read 12 lines]
^G Help
^X Exit
^O Write Out
^R Read File
^W Where Is
^\ Replace
^K Cut
^U Paste
^T Execute
^J Justify
^C Location
^/ Go To Line



In this program, we have used the OR operator with the if else case means if the fork fails then the else case will run. OR the operator will work if one of the conditions is false it will false.