

UIT2512---Operating Systems Practices Lab

3) Create 1 Parent and Two Child Processes where the Parent Process waits for Child 2 to Complete in Python

Name: Vasundhara.B

Roll no: 3122 21 5002 119

Here, you have to write a program in Python to create One Parent - Two Children, where the Parent process terminates only after the child 2 completes its execution. Use the appropriate system calls for the same in the parent process.

CODE:

```
import os, sys

def child1():
    print("Child 1 process executing")
    sys.exit(0)

def child2():
    print("Child 2 process executing")
    sys.exit(0)

if __name__ == "__main__":
    # Create the first child process
    child1_pid = os.fork()

    if child1_pid == 0: #
        child1()

    # Create the second child process
    child2_pid = os.fork()

    if child2_pid == 0:
        child2()

    # This is the parent process
    print(f"Parent process (PID {os.getpid()}) waiting for Child 2 (PID {child2_pid}) to complete...")
    os.wait() # Wait for any child process to complete
    os.wait() # Wait for the second child process to complete
    print(f"Parent process (PID {os.getpid()}) is exiting")
```

OUTPUT:

```
Child 1 process executing  
Child 2 process executing  
Parent process (PID 2906) waiting for Child 2 (PID 2908) to complete...  
Parent process (PID 2906) is exiting
```