

National University of Computer and Emerging Sciences Peshawar

Name:

Ahmed Ali

Roll No:

19P-0042

Subject:

Operating System

Question

(2)

Code:

```
from multiprocessing import Process
import os

def info(title):
    print(title)
    print('module name:', __name__)
    print('parent process:', os.getppid())
    print('process id:', os.getpid())

def f(name):
    info('function f')
    print('hello', name)

if __name__ == '__main__':
    info('main line')
    p = Process(target=f, args=('bob',))
    p.start()
    p.join()
```

Output:

```
main line
module name: __main__
parent process: 2643
process id: 2731
function f
module name: __mp_main__
parent process: 2731
process id: 2733
hello bob
```

Code:

```
from multiprocessing import Process
import <u>os</u>
def info(title):
    print(title)
    print('module name:', __name__)
    print('parent process:', os.getppid())
    print('process id:', os.getpid())
def f(name):
    info('function f')
    print('hello', name)
if __name__ == '__main__':
    info('Process 1')
    p1 = <u>Process</u>(target=f, args=('I am process 1',))
    p1.start()
    p1.join()
    #Process 2
    info('Process 2')
    p2 = <u>Process</u>(target=f, args=('I am process 2',))
    p2.start()
    p2.join()
    #Process 3
    info('Process 3')
    p3 = <u>Process</u>(target=f, args=('I am process 3',))
    p3.start()
    p3.join()
```

Output:

```
Process 1
module name: __main__
parent process: 2786
process id: 2798
function f
module name: __mp_main__
parent process: 2798
process id: 2800
hello I am process 1
Process 2
module name: __main__
parent process: 2786
process id: 2798
function f
module name: __mp_main__
parent process: 2798
process id: 2802
hello I am process 2
Process 3
module name: __main__
parent process: 2786
process id: 2798
function f
module name: __mp_main__
parent process: 2798
process id: 2803
hello I am process 3
```

(4)

Answer:

The process class constructor should always be called with keyword arguments and target. *target* is the callable object to be invoked by the start() method. *args* is the argument tuple for the target invocation.