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**SE(4A) | 19F-0916**

Operating System Lab

Lab 7 Process Creation 2 exec()

**QUESTION # 01**

**CODE:**

**#include<iostream>**

**#include<unistd.h>**

**#include<sys/wait.h>**

**using namespace std;**

**//TASK 1**

**int main()**

**{**

**int F1=fork(); // 1st Fork Call**

**int i = 0;**

**cout << endl;**

**if (F1 == 0)**

**{**

**cout<<"Child " << ++i << " ID is :" << getpid() << endl;**

**}**

**else**

**{**

**cout<<"Parent 1 ID is :" << getppid() << " THIS IS PARENTTTTT " << endl;**

**}**

**int F2=fork(); // 2nd Fork Call**

**if (F2 == 0)**

**{**

**cout<<"Child " << ++i + 1 << " ID is :" << getpid() << endl;**

**}**

**else**

**{**

**cout<<"Parent 2 ID is :" << getppid() << " THIS IS PARENTTTTT " << endl;**

**}**

**return 0;**

**}**

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**QUESTION # 02**

**CODE:**

**EXAMPLE FILE:**

**#include<iostream>**

**#include<unistd.h>**

**#include<sys/wait.h>**

**using namespace std;**

**int main()**

**{**

**int pid = fork();**

**if (pid == 0 )**

**{**

**cout<<"We are in Example pid is :" << getpid() << endl ;**

**execl("./hello916","./hello916", NULL);**

**cout<<endl;**

**}**

**return 0;**

**}**

**HELLO FILE:**

**#include<iostream>**

**#include<unistd.h>**

**#include<sys/wait.h>**

**using namespace std;**

**int main()**

**{**

**cout << " We are in hellow YIPPIIII " << endl;**

**cout << " We are in hellow with pid : " <<getpid() << endl ;**

**return 0;**

**}**

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**QUESTION # 03**

**CODE:**

**Multiplication File:**

**#include<iostream>**

**#include<unistd.h>**

**#include<sys/wait.h>**

**using namespace std;**

**int main()**

**{**

**int pid = fork();**

**int i = 5 , j = 6;**

**if (pid == 0 )**

**{**

**cout<<"We are in Multiplication pid is :" << getpid() << endl ;**

**cout<< "By Multiplying 5 and 6 we get : " << i \* j << endl ;**

**execl("./Addition916","./Addition916",NULL);**

**cout<<endl;**

**}**

**return 0;**

**}**

**Addition File:**

**#include<iostream>**

**#include<unistd.h>**

**#include<sys/wait.h>**

**using namespace std;**

**int main()**

**{**

**int i = 5 , j = 6;**

**cout << " We are in Addition YIPPIIII " << endl;**

**cout<< "By Adding 5 and 6 we get : " << i + j << endl ;**

**cout << " We are in Addition with pid : " <<getpid() << endl ;**

**return 0;**

**}**

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