Bahria University,

Karachi Campus



LAB EXPERIMENT NO.

**08**

LIST OF TASKS

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| TASK NO | OBJECTIVE |
| 1 | **CreateProcess that run your current execution file (parent process) with and child process(notepad), display versionId, ThreadId, processId of both parent and child process.** |
| 2 | **CreateProcess that run your current execution file (parent process) with and child process(MSword), display versionId, ThreadId, processId of both parent and child process.** |
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Submitted On:

**29/12/2022**

**Task # 01: CreateProcess that run your current execution file (parent process) with and child process(notepad), display versionId, ThreadId, processId of both parent and child process.**

**Solution:**

#include<iostream>

#include<Windows.h>

using namespace std;

int main() {

HANDLE hprocess = NULL;

HANDLE hthread = NULL;

STARTUPINFOW si;

PROCESS\_INFORMATION pi;

DWORD dwProcessId = 0;

DWORD dwthreadId = 0;

ZeroMemory(&si, sizeof(si));

ZeroMemory(&pi, sizeof(pi));

DWORD Ret = 0, dwPID = 0, dwTID = 0, dwPver = 0;

dwPID = GetCurrentProcessId();

cout << "GetCurrentProcessId: " << dwPID << endl;

dwTID = GetCurrentThreadId();

cout << "GetCurrentThreadID: " << dwTID << endl;

cout << "Command Line:%s\n" << GetCommandLine() << endl;

dwPver = GetProcessVersion(dwPID);

cout << "Get Process Version: " << dwPver << endl;

cout << "Starting another process i.e. child process\n" << endl;

BOOL bCreateProcess = CreateProcessW(L"C:\\Windows\\System32\\notepad.exe", NULL, NULL, NULL, FALSE, 0, NULL, NULL, &si, &pi);

if (bCreateProcess == false) {

cout << "Failed" << endl;

}

cout << "Create process successfully" << endl;

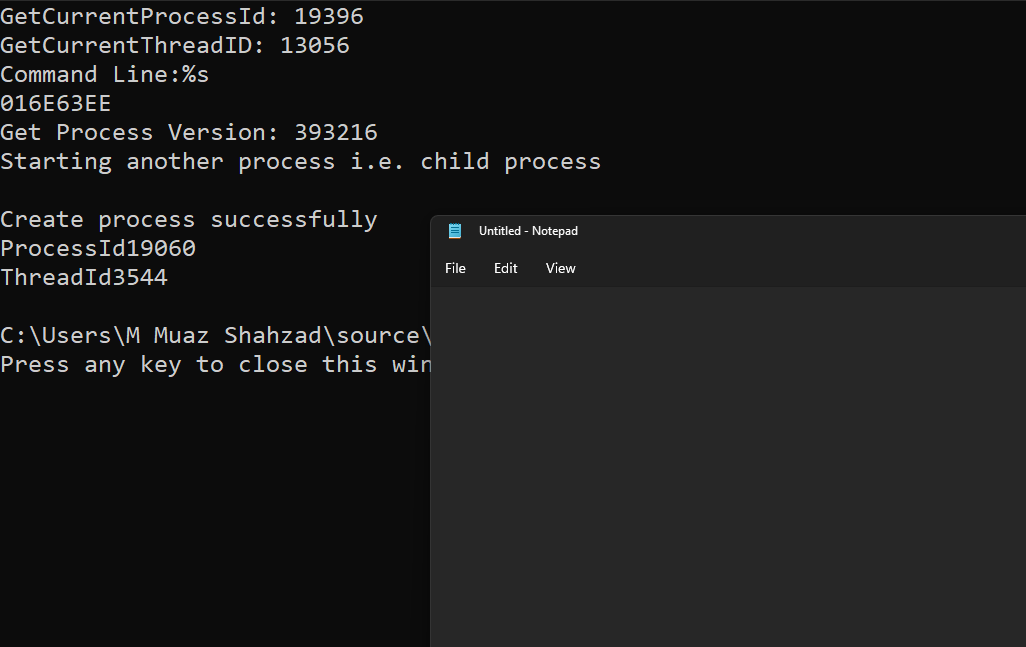
cout << "ProcessId" << pi.dwProcessId << endl;

cout << "ThreadId" << pi.dwThreadId << endl;

return 0;

}

**Output:**



**Task # 02: CreateProcess that run your current execution file (parent process) with and child process(MSword), display versionId, ThreadId, processId of both parent and child process.**

**Solution:**

#include<iostream>

#include<Windows.h>

using namespace std;

int main(){

HANDLE hprocess=NULL;

HANDLE hthread=NULL;

STARTUPINFOW si;

PROCESS\_INFORMATION pi;

DWORD dwProcessId=0;

DWORD dwthreadId=0;

ZeroMemory (&si,sizeof(si));

ZeroMemory(&pi,sizeof(pi));

DWORD Ret=0,dwPID=0,dwTID=0,dwPver=0;

dwPID=GetCurrentProcessId();

cout<<"GetCurrentProcessId: "<<dwPID<<endl;

dwTID=GetCurrentThreadId();

cout<<"GetCurrentThreadID: "<<dwTID<<endl;

cout<<"Command Line:%s\n"<<GetCommandLine()<<endl;

dwPver=GetProcessVersion(dwPID);

cout<<"Get Process Version: "<<dwPver<<endl;

cout<<"Starting another process i.e. child process\n"<<endl;

// BOOL bCreateProcess=CreateProcessW(L"C:\\Windows\\System32\\notepad.exe",NULL,NULL,NULL,FALSE,0,NULL,NULL,&si,&pi);

BOOL bCreateProcess=CreateProcessW(L"C:\\Program Files\\Microsoft Office\\Office16\\WINWORD.exe",NULL,NULL,NULL,FALSE,0,NULL,NULL,&si,&pi);

if(bCreateProcess==false){

cout<<"Failed"<<endl;

}

cout<<"Create process successfully"<<endl;

cout<<"ProcessId"<<pi.dwProcessId<<endl;

cout<<"ThreadId"<<pi.dwThreadId<<endl;

return 0;}

**Output:**

