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:

**26/12/2022**

**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;

    }

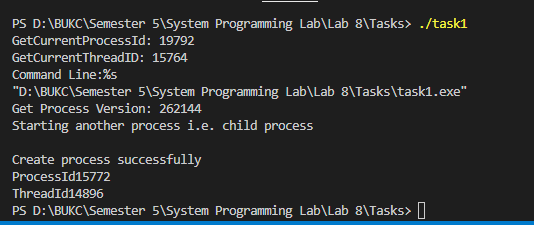
    cout<<"Create process successfully"<<endl;

    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:**

