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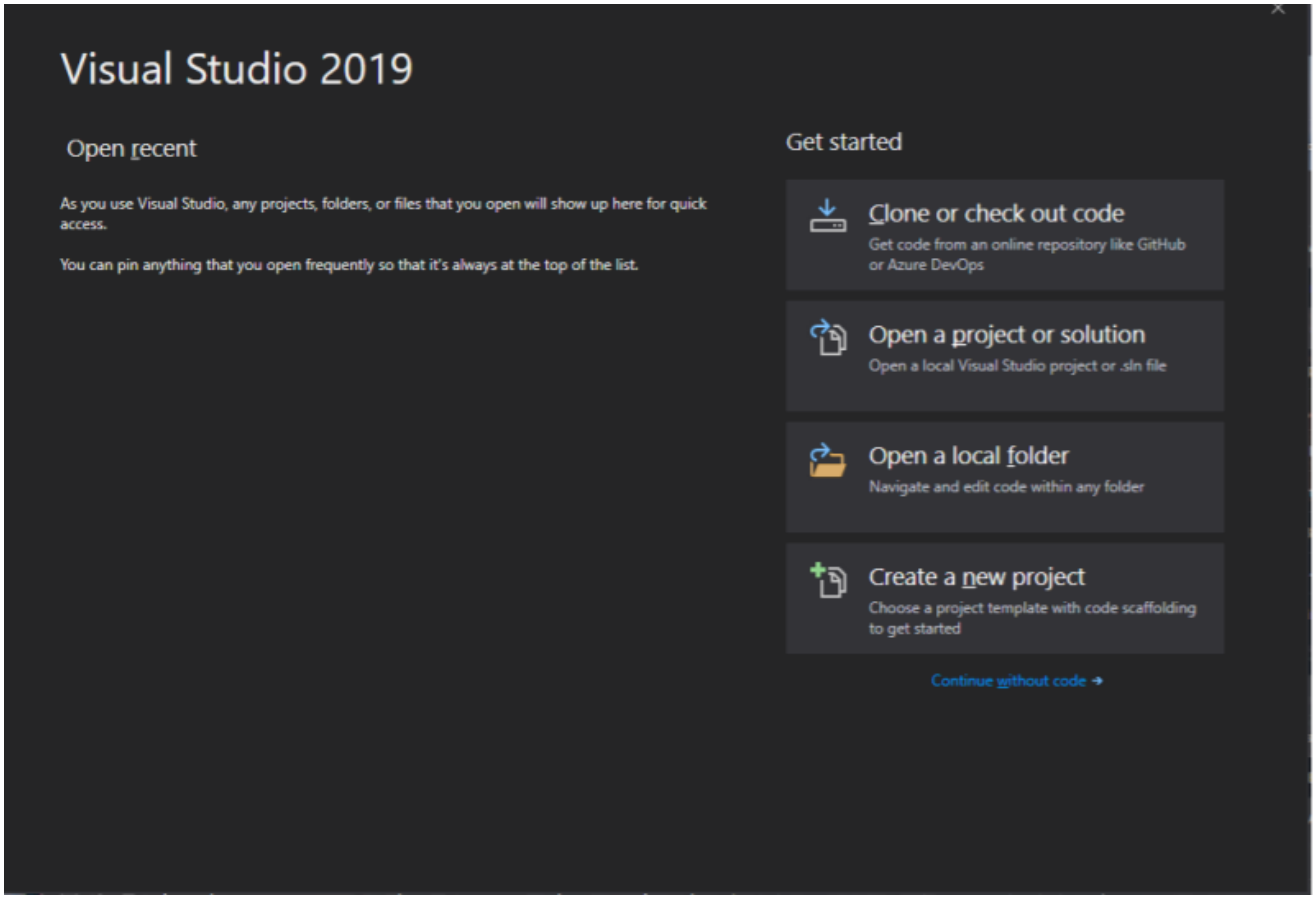
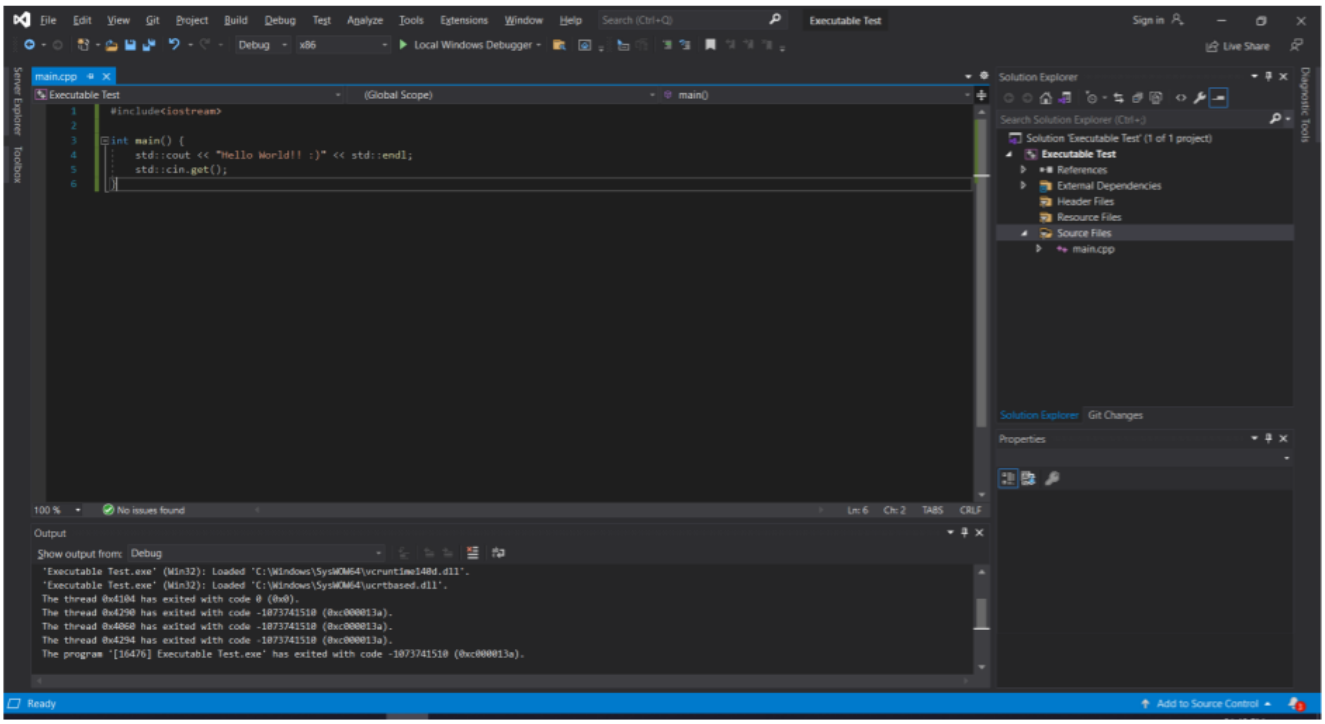
Registration Number : 19BCN7014

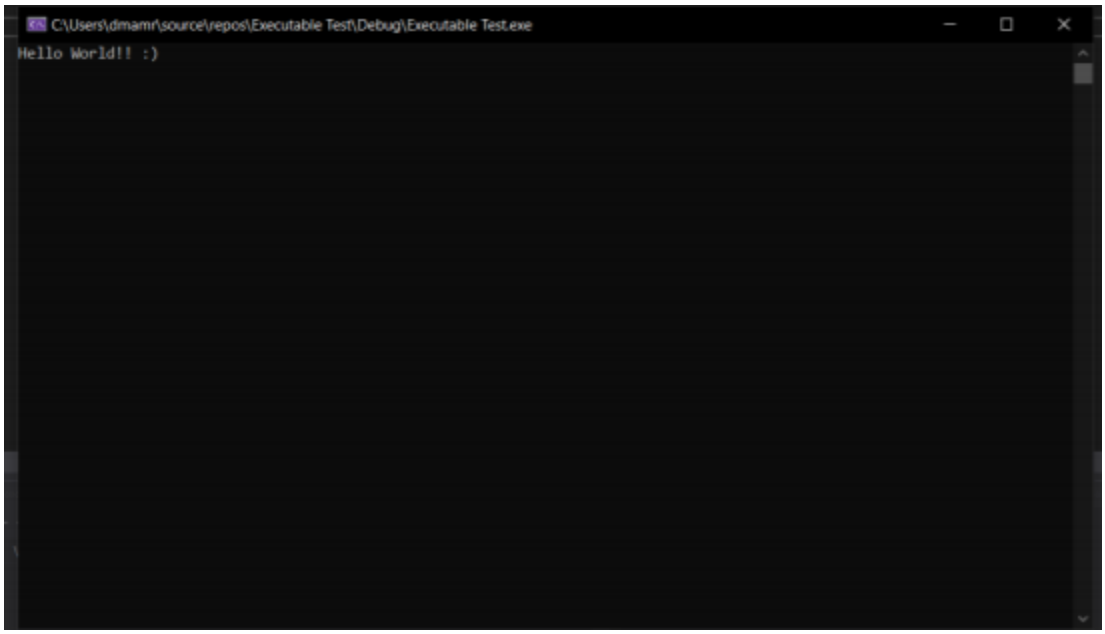
Subject Code : CSE2010

1. Download and install visual studio (recent edition)

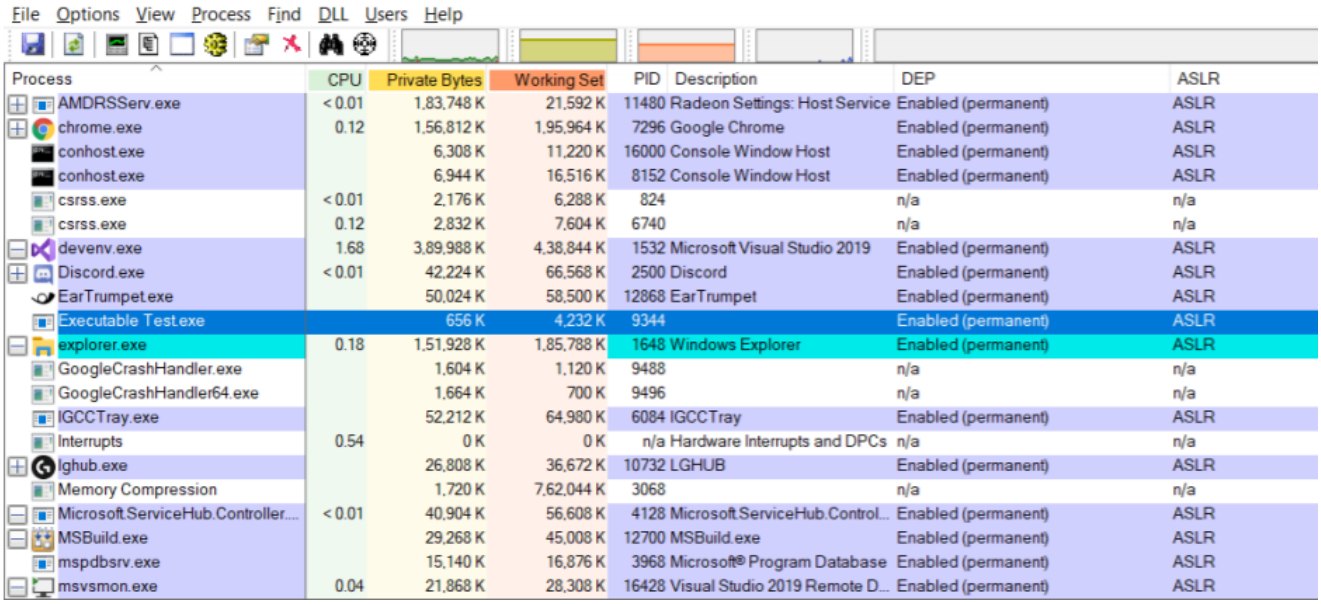
Write a C++ code of your own to build an executable and run the same.




File Edit View Git Project Build Debug Test Analyze Tools Extensions Window Help
Executable Test
Debug x86 Local Windows Debugger
main.cpp
Executable Test (Global Scope) main()
#include<iostream>
int main() {
std::cout << "Hello World!! :)" << std::endl;
std::cin.get();
}
Solution Explorer
Solution 'Executable Test' (1 of 1 project)
Executable Test
References
External Dependencies
Header Files
Resource Files
Source Files
main.cpp
Properties
100 % No issues found
Output
Show output from: Debug
'Executable Test.exe' (Win32): Loaded 'C:\Windows\SysWOW64\vcruntime140d.dll'.
'Executable Test.exe' (Win32): Loaded 'C:\Windows\SysWOW64\ucrtbased.dll'.
The thread 0x4104 has exited with code 0 (0x0).
The thread 0x4290 has exited with code -1073741510 (0xc000013a).
The thread 0x4060 has exited with code -1073741510 (0xc000013a).
The thread 0x4294 has exited with code -1073741510 (0xc000013a).
The program '[16476] Executable Test.exe' has exited with code -1073741510 (0xc000013a).
Ready
Add to Source Control


C:\Users\dmamr\source\repos\Executable Test\Debug\Executable Test.exe
Hello World!! :)

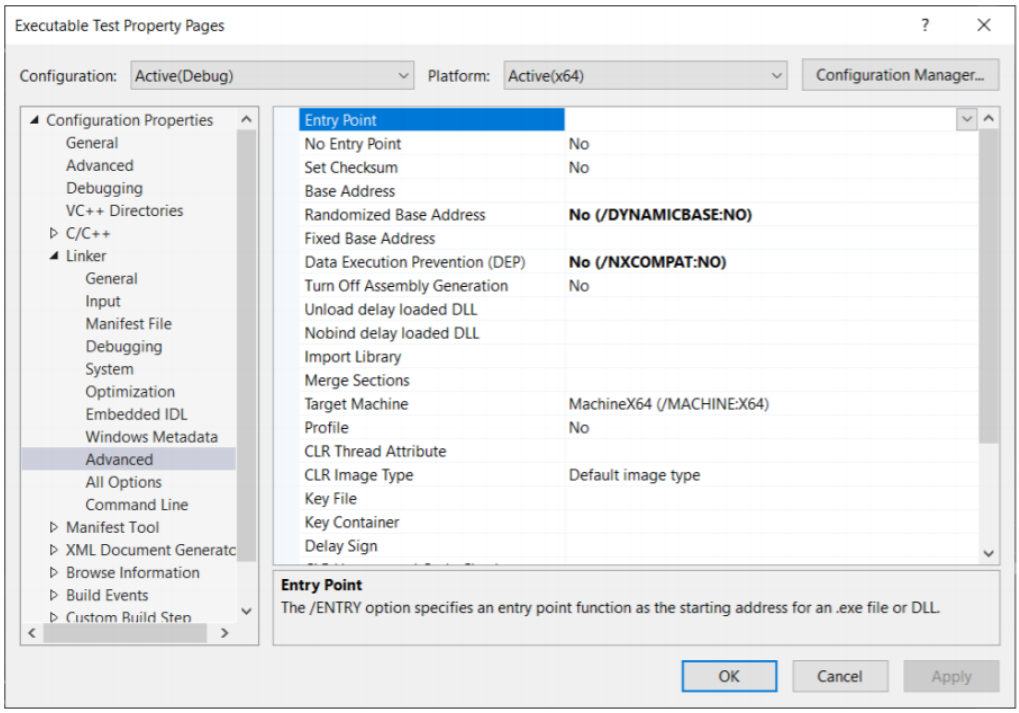
2. Download process explorer and verify the DEP & ASLR status

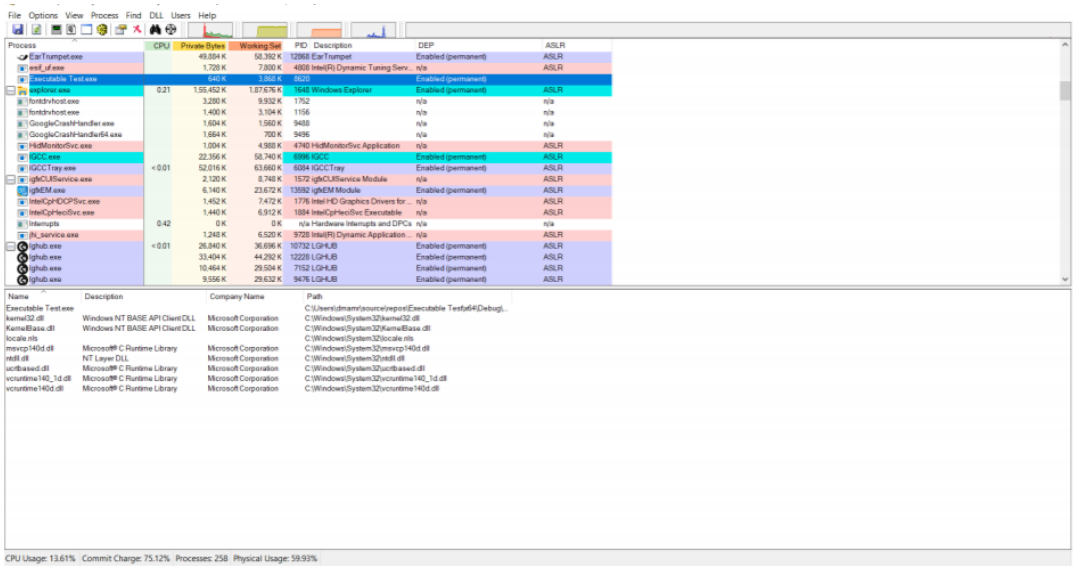


Process	CPU	Private Bytes	Working Set	PID	Description	DEP	ASLR
AMDRSServ.exe	< 0.01	1,83,748 K	21,592 K	11480	Radeon Settings: Host Service	Enabled (permanent)	ASLR
chrome.exe	0.12	1,56,812 K	1,95,964 K	7296	Google Chrome	Enabled (permanent)	ASLR
conhost.exe		6,308 K	11,220 K	16000	Console Window Host	Enabled (permanent)	ASLR
conhost.exe		6,944 K	16,516 K	8152	Console Window Host	Enabled (permanent)	ASLR
csrss.exe	< 0.01	2,176 K	6,288 K	824		n/a	n/a
csrss.exe	0.12	2,832 K	7,604 K	6740		n/a	n/a
devenv.exe	1.68	3,89,988 K	4,38,844 K	1532	Microsoft Visual Studio 2019	Enabled (permanent)	ASLR
Discord.exe	< 0.01	42,224 K	66,568 K	2500	Discord	Enabled (permanent)	ASLR
EarTrumpet.exe		50,024 K	58,500 K	12868	EarTrumpet	Enabled (permanent)	ASLR
Executable Test.exe		656 K	4,232 K	9344		Enabled (permanent)	ASLR
explorer.exe	0.18	1,51,928 K	1,85,788 K	1648	Windows Explorer	Enabled (permanent)	ASLR
GoogleCrashHandler.exe		1,604 K	1,120 K	9488		n/a	n/a
GoogleCrashHandler64.exe		1,664 K	700 K	9496		n/a	n/a
IGCCTray.exe		52,212 K	64,980 K	6084	IGCCTray	Enabled (permanent)	ASLR
Interrupts	0.54	0 K	0 K	n/a	Hardware Interrupts and DPCs	n/a	n/a
lghub.exe		26,808 K	36,672 K	10732	LGHUB	Enabled (permanent)	ASLR
Memory Compression		1,720 K	7,62,044 K	3068		n/a	n/a
Microsoft.ServiceHub.Controller....	< 0.01	40,904 K	56,608 K	4128	Microsoft.ServiceHub.Control...	Enabled (permanent)	ASLR
MSBuild.exe		29,268 K	45,008 K	12700	MSBuild.exe	Enabled (permanent)	ASLR
mspdbsrv.exe		15,140 K	16,876 K	3968	Microsoft® Program Database	Enabled (permanent)	ASLR
msvsmon.exe	0.04	21,868 K	28,308 K	16428	Visual Studio 2019 Remote D...	Enabled (permanent)	ASLR

3. Disable software DEP, ASLR and SEH in the visual studio and rebuild the same executable

   Project > properties > configuration properties > linker





4. By Default, in project properties, DEP and ASLR properties are enabled and even upon disabling them, DEP is still in affect