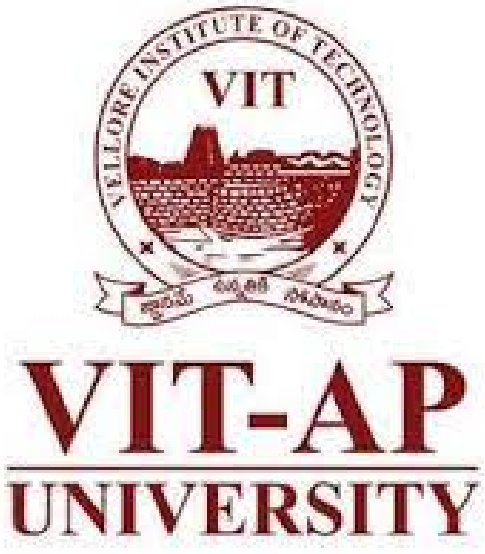


Name: Panwala Harshit Rakesh

Reg. No.: 18BCE7137

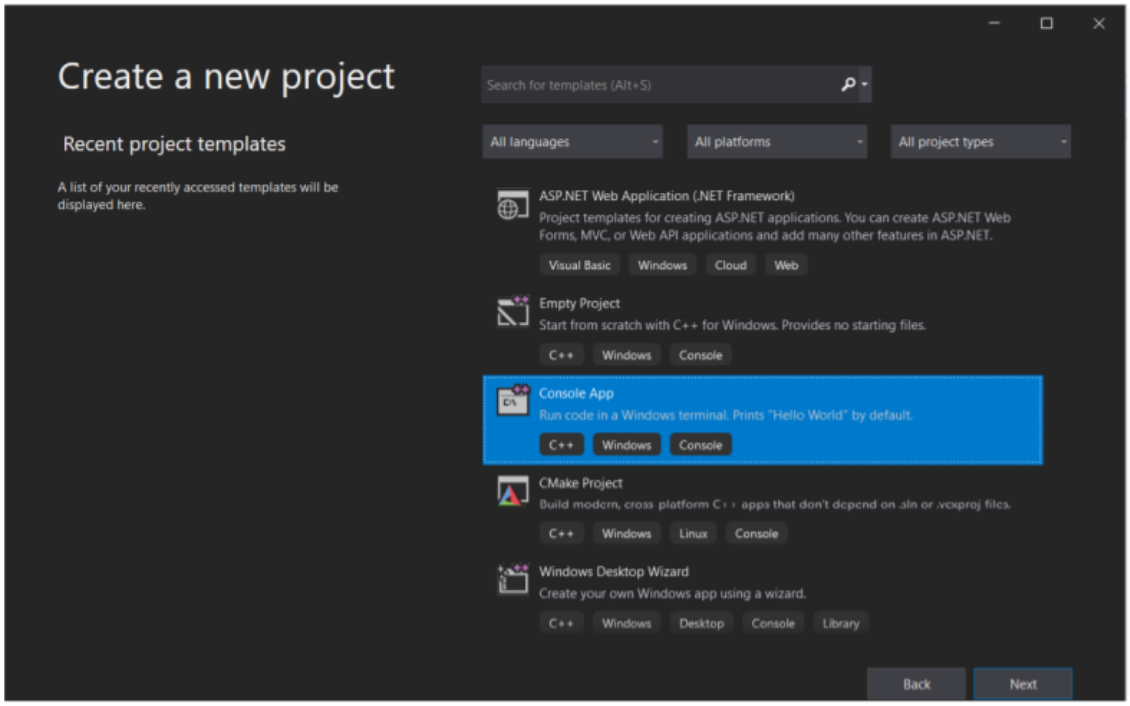
Course code/name: CSE2010/ Secure Coding

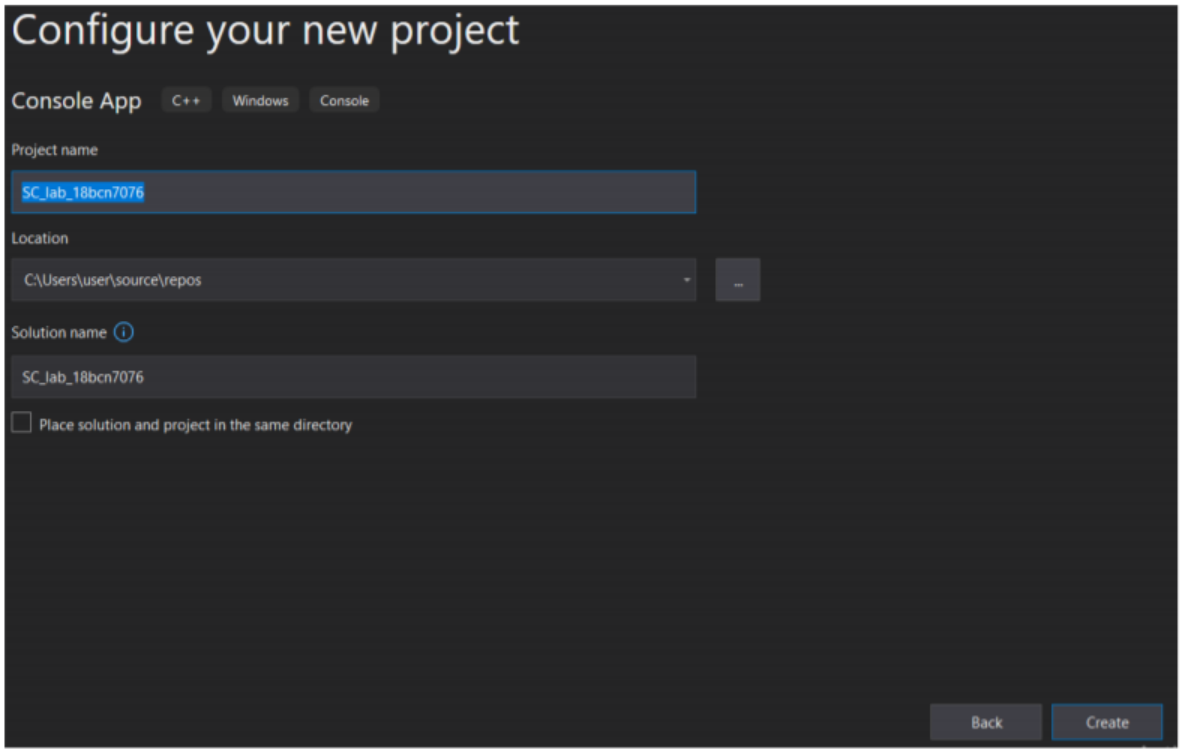
Slot: L23 + L24

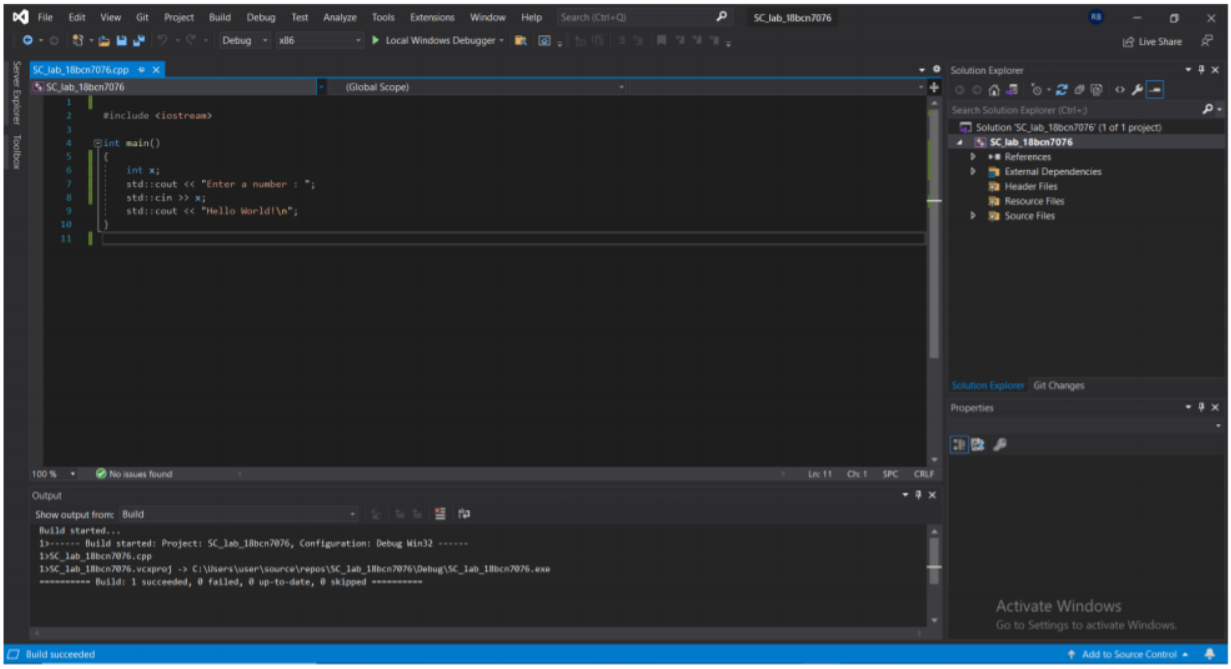
Faculty: Prof. Sibi Chakkaravarthy S

LAB-11

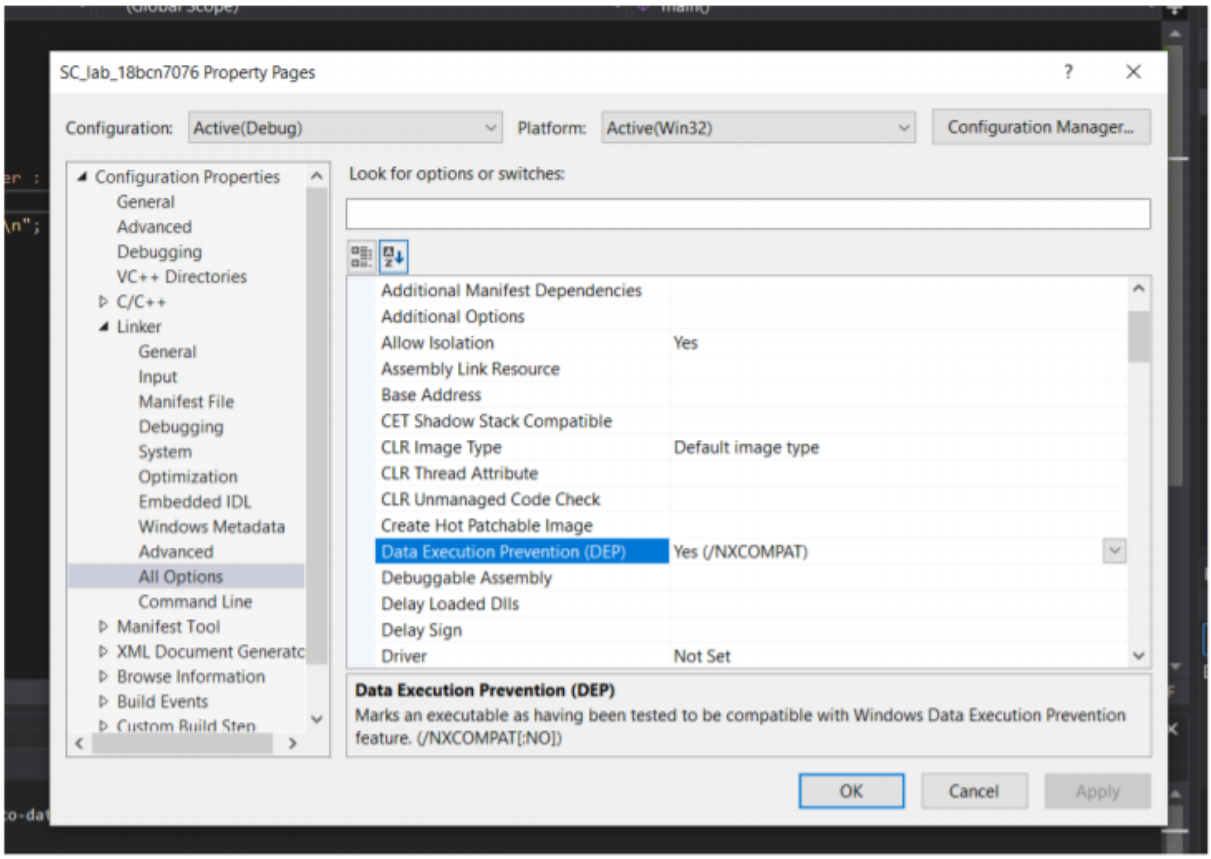
- Downloaded visual studio and process explorer.
- Creating a new project.

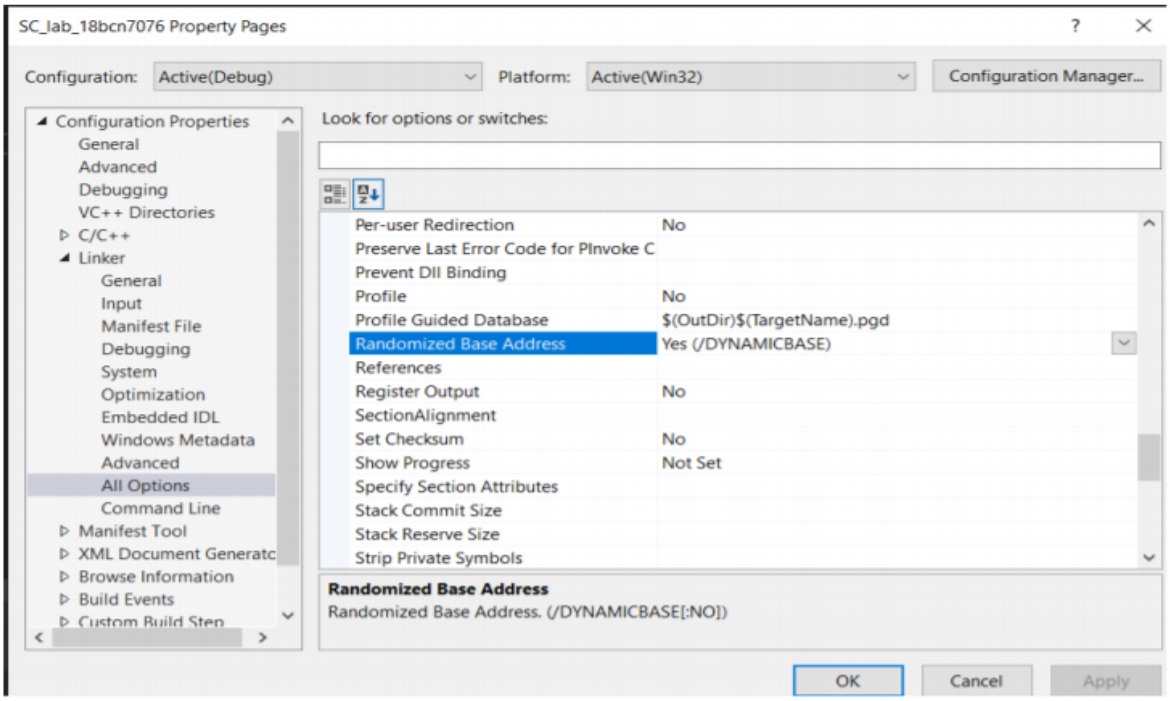






- Visiting the properties of the project and verifying the DEP,ASLR and SEH properties.


SC_lab_18bcn7076 Property Pages
Configuration: Active(Debug)
Platform: Active(Win32)
Configuration Manager...
Configuration Properties
General
Advanced
Debugging
VC++ Directories
C/C++
Linker
General
Input
Manifest File
Debugging
System
Optimization
Embedded IDL
Windows Metadata
Advanced
All Options
Command Line
Manifest Tool
XML Document Generatc
Browse Information
Build Events
Custom Build Step
Look for options or switches:
Additional Manifest Dependencies
Additional Options
Allow Isolation Yes
Assembly Link Resource
Base Address
CET Shadow Stack Compatible
CLR Image Type Default image type
CLR Thread Attribute
CLR Unmanaged Code Check
Create Hot Patchable Image
Data Execution Prevention (DEP) Yes (/NXCOMPAT)
Debuggable Assembly
Delay Loaded Dlls
Delay Sign
Driver Not Set
Data Execution Prevention (DEP)
Marks an executable as having been tested to be compatible with Windows Data Execution Prevention feature. (/NXCOMPAT[:NO])
OK
Cancel
Apply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Platform: Active(Win32)
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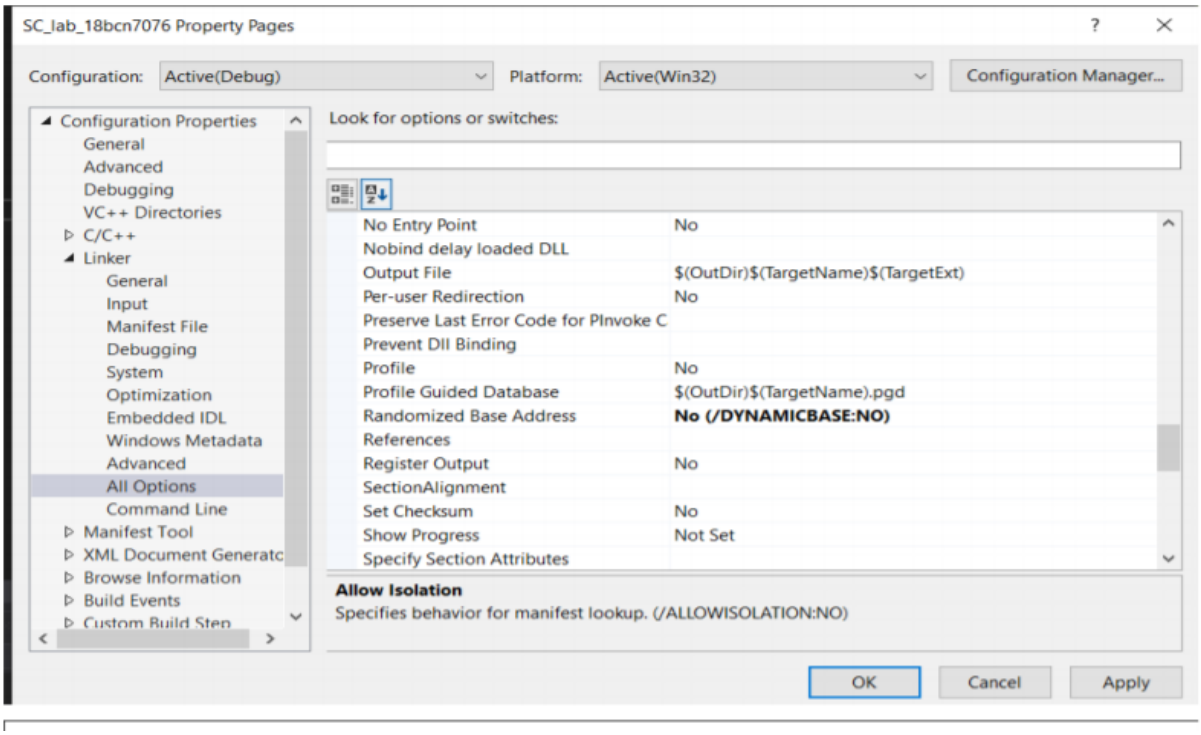
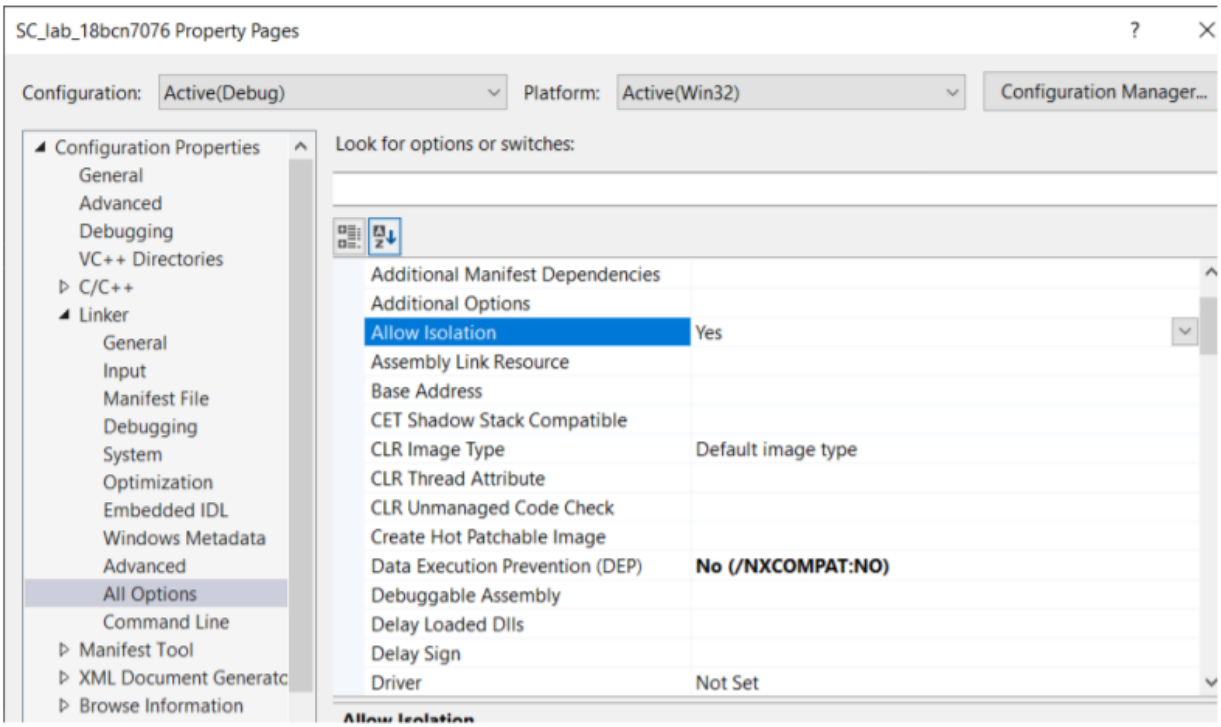
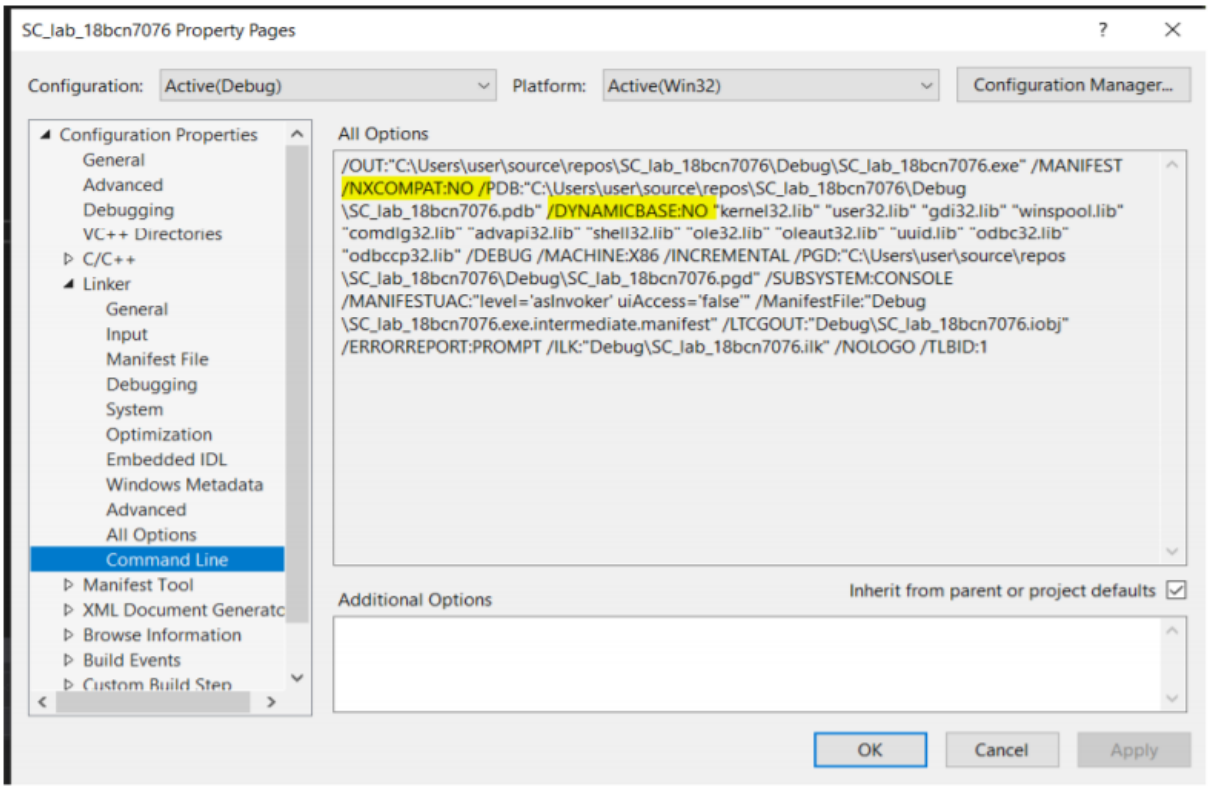
System
Optimization
Embedded IDL
Windows Metadata
Advanced
All Options
Command Line
Manifest Tool
XML Document Generatc
Browse Information
Build Events
Custom Build Step
Look for options or switches:
Per-user Redirection No
Preserve Last Error Code for PInvoke C
Prevent Dll Binding
Profile No
Profile Guided Database $(OutDir)$(TargetName).pgd
Randomized Base Address Yes (/DYNAMICBASE)
References
Register Output No
SectionAlignment
Set Checksum No
Show Progress Not Set
Specify Section Attributes
Stack Commit Size
Stack Reserve Size
Strip Private Symbols
Randomized Base Address
Randomized Base Address. (/DYNAMICBASE[:NO])
OK
Cancel
Apply

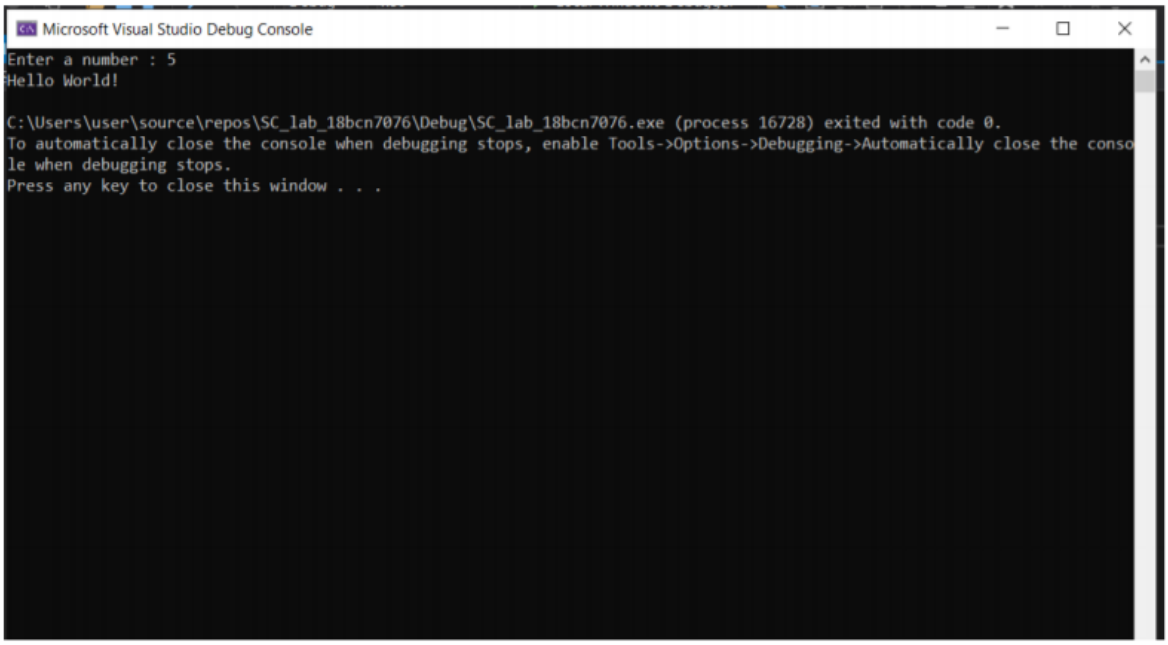
Changing the default option to **no** in command line to check them in process explorer



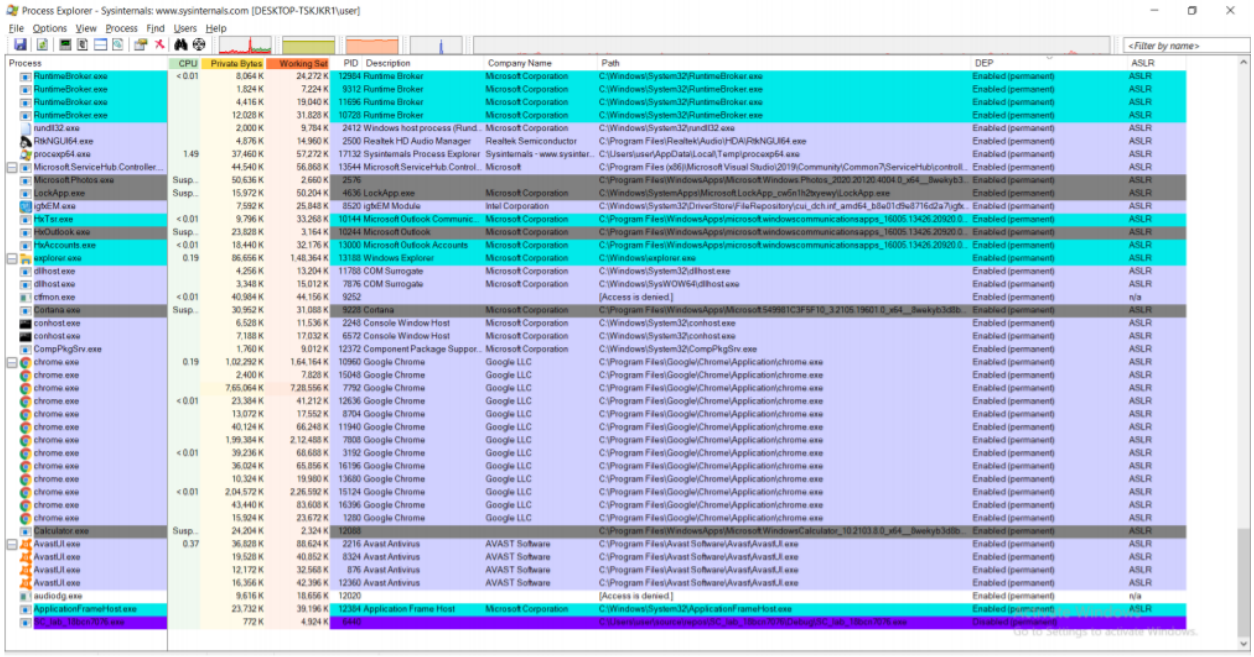


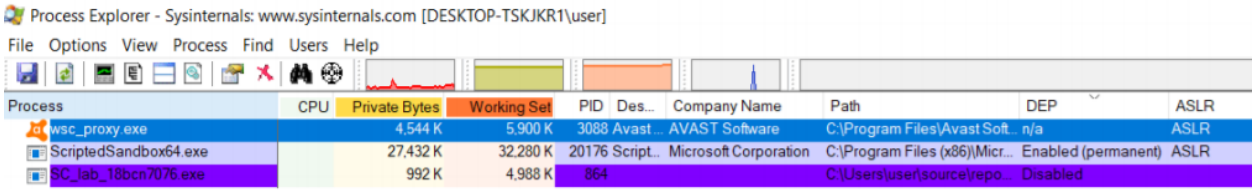


After executing the file .cpp

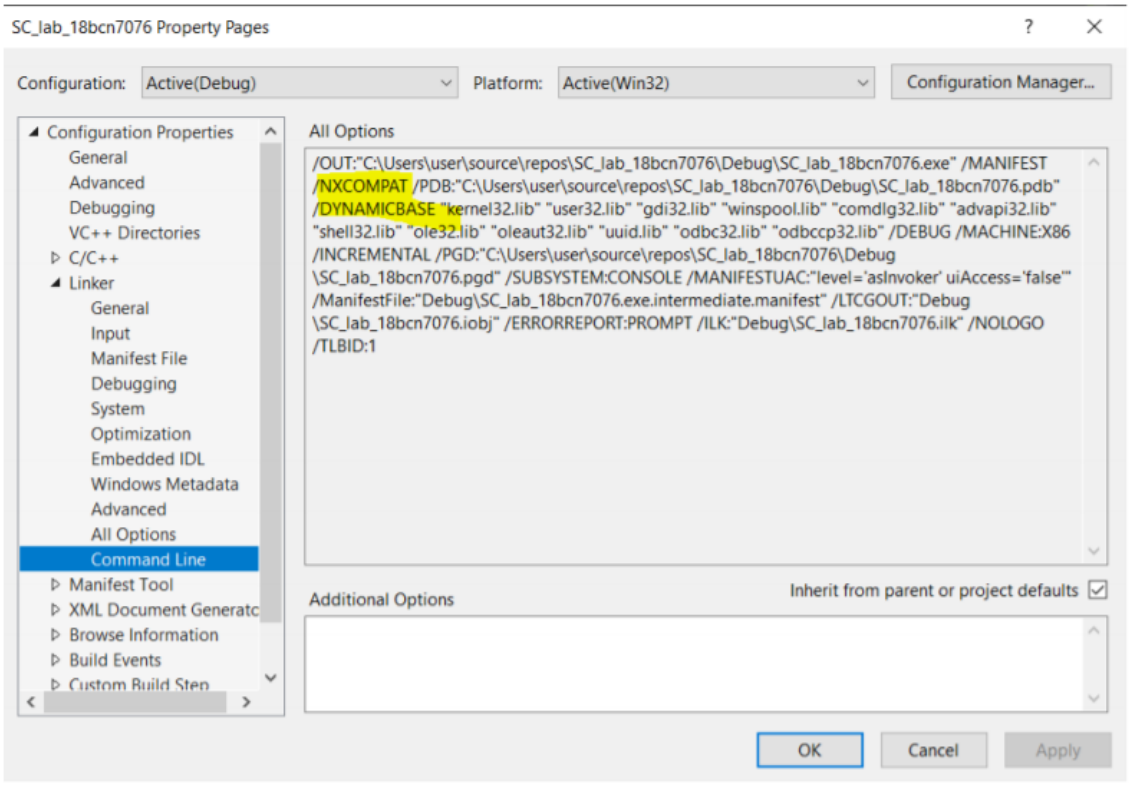


Checking the DEP and ASLR status in process explorer





Again enabling the DEP and ASLR status and also the SEH


SC_lab_18bcn7076 Property Pages
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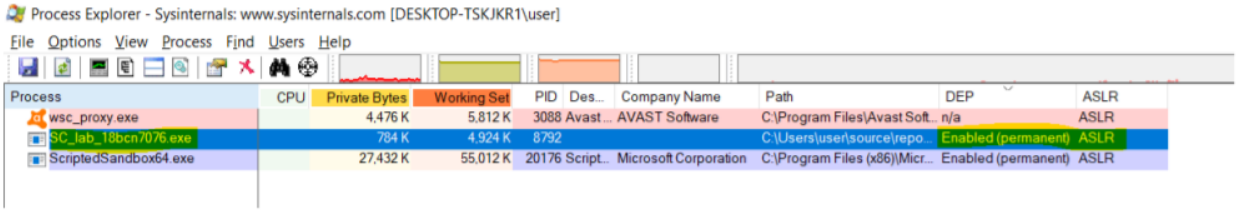
System
Optimization
Embedded IDL
Windows Metadata
Advanced
All Options
Command Line
Manifest Tool
XML Document Generatc
Browse Information
Build Events
Custom Build Step
All Options
/OUT:"C:\Users\user\source\repos\SC_lab_18bcn7076\Debug\SC_lab_18bcn7076.exe" /MANIFEST /NXCOMPAT /PDB:"C:\Users\user\source\repos\SC_lab_18bcn7076\Debug\SC_lab_18bcn7076.pdb" /DYNAMICBASE "kernel32.lib" "user32.lib" "gdi32.lib" "winspool.lib" "comdlg32.lib" "advapi32.lib" "shell32.lib" "ole32.lib" "oleaut32.lib" "uuid.lib" "odbc32.lib" "odbccp32.lib" /DEBUG /MACHINE:X86 /INCREMENTAL /PGD:"C:\Users\user\source\repos\SC_lab_18bcn7076\Debug\SC_lab_18bcn7076.pgd" /SUBSYSTEM:CONSOLE /MANIFESTUAC:"level='asInvoker' uiAccess='false'" /ManifestFile:"Debug\SC_lab_18bcn7076.exe.intermediate.manifest" /LTCGOUT:"Debug\SC_lab_18bcn7076.iobj" /ERRORREPORT:PROMPT /ILK:"Debug\SC_lab_18bcn7076.ilk" /NOLOGO /TLBID:1
Additional Options
Inherit from parent or project defaults
OK
Cancel
Apply


Microsoft Visual Studio Debug Console
Enter a number : 5
Hello World!
C:\Users\user\source\repos\SC_lab_18bcn7076\Debug\SC_lab_18bcn7076.exe (process 16728) exited with code 0.
To automatically close the console when debugging stops, enable Tools->Options->Debugging->Automatically close the conso
le when debugging stops.
Press any key to close this window . . .


Process Explorer - Sysinternals: www.sysinternals.com [DESKTOP-TSKJKR1\user]
File Options View Process Find Users Help
Process CPU Private Bytes Working Set PID Des... Company Name Path DEP ASLR
wsc_proxy.exe 4,476 K 5,812 K 3088 Avast... AVAST Software C:\Program Files\Avast Soft... n/a ASLR
SC_lab_18bcn7076.exe 784 K 4,924 K 8792 C:\Users\user\source\repo... Enabled (permanent) ASLR
ScriptedSandbox64.exe 27,432 K 55,012 K 20176 Script... Microsoft Corporation C:\Program Files (x86)\Micr... Enabled (permanent) ASLR