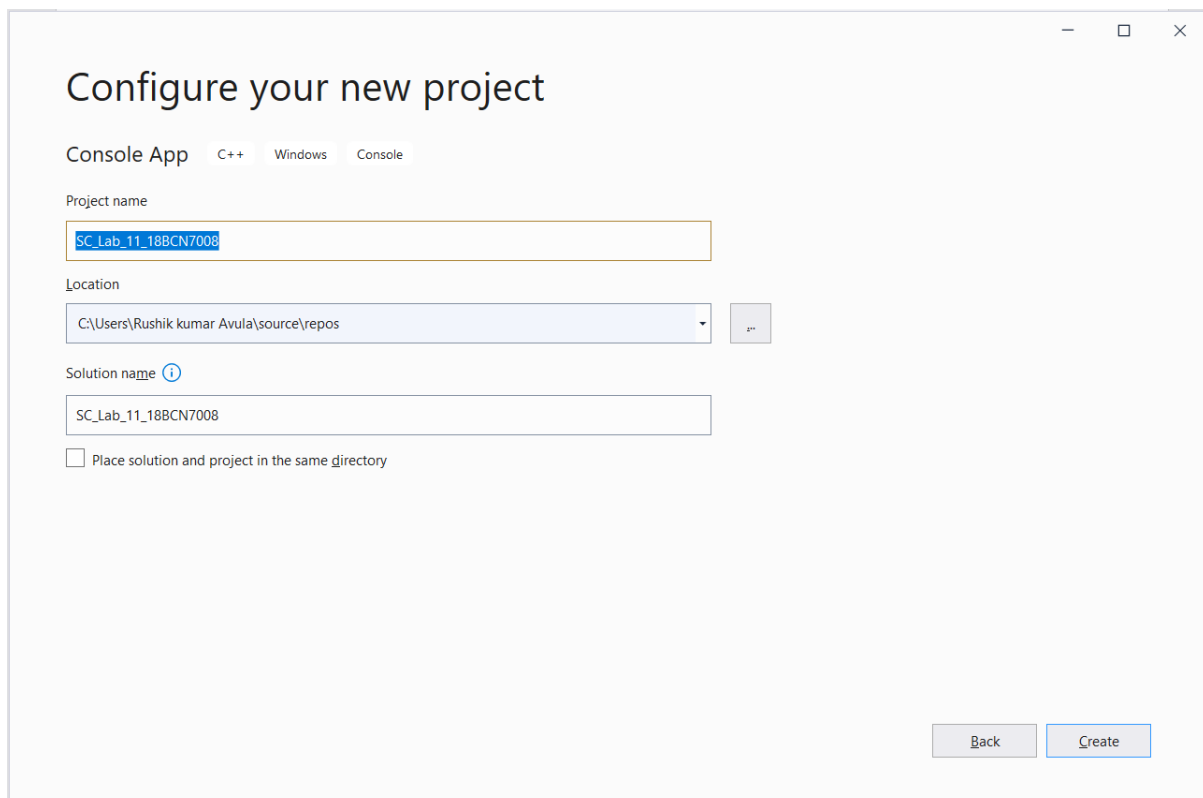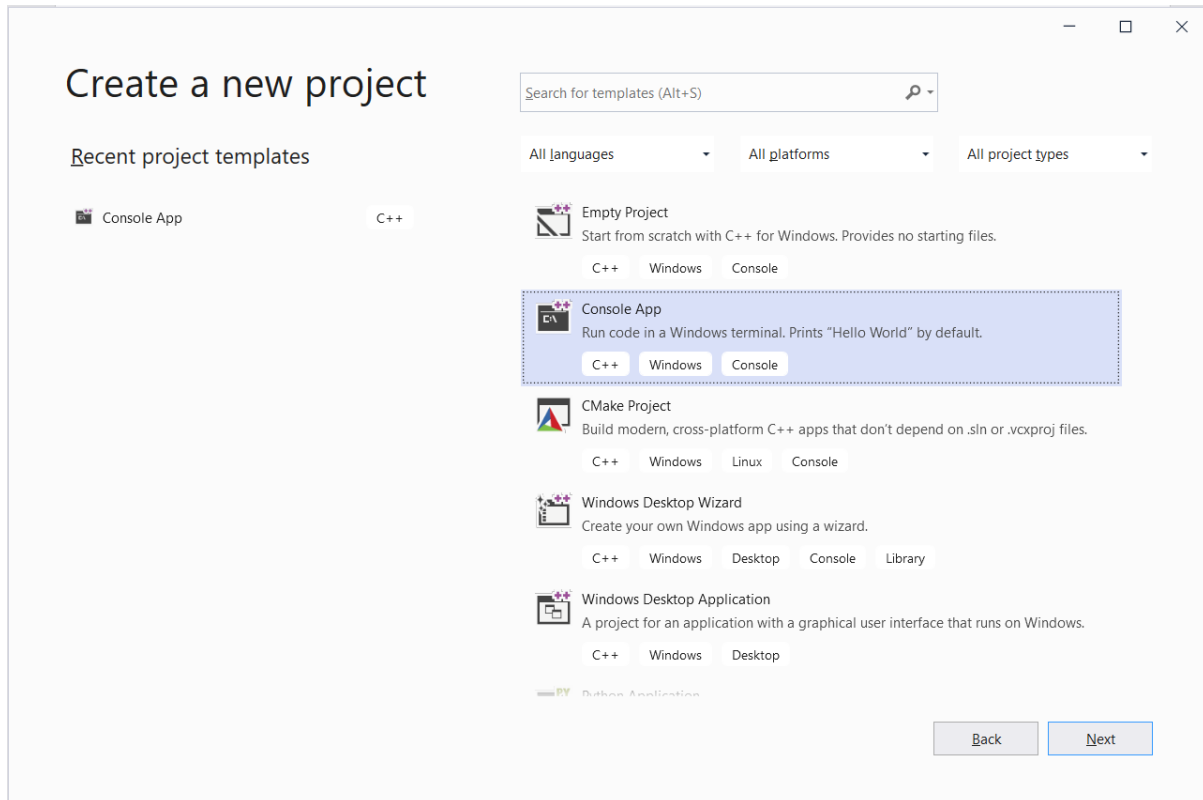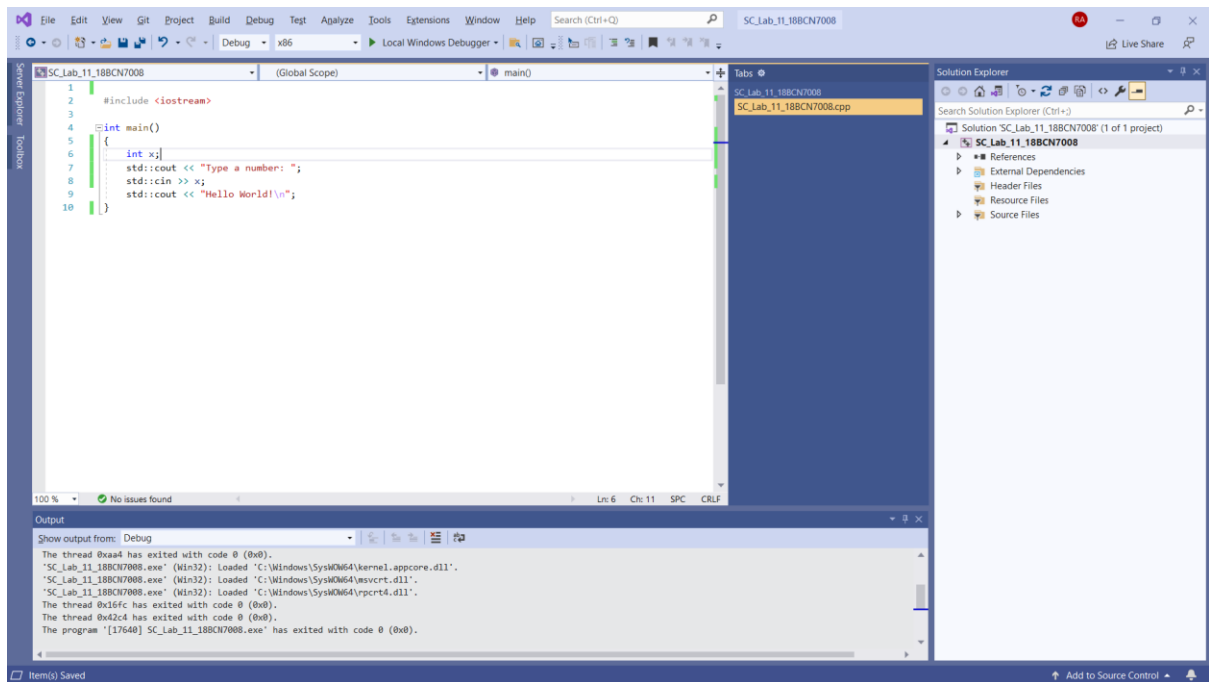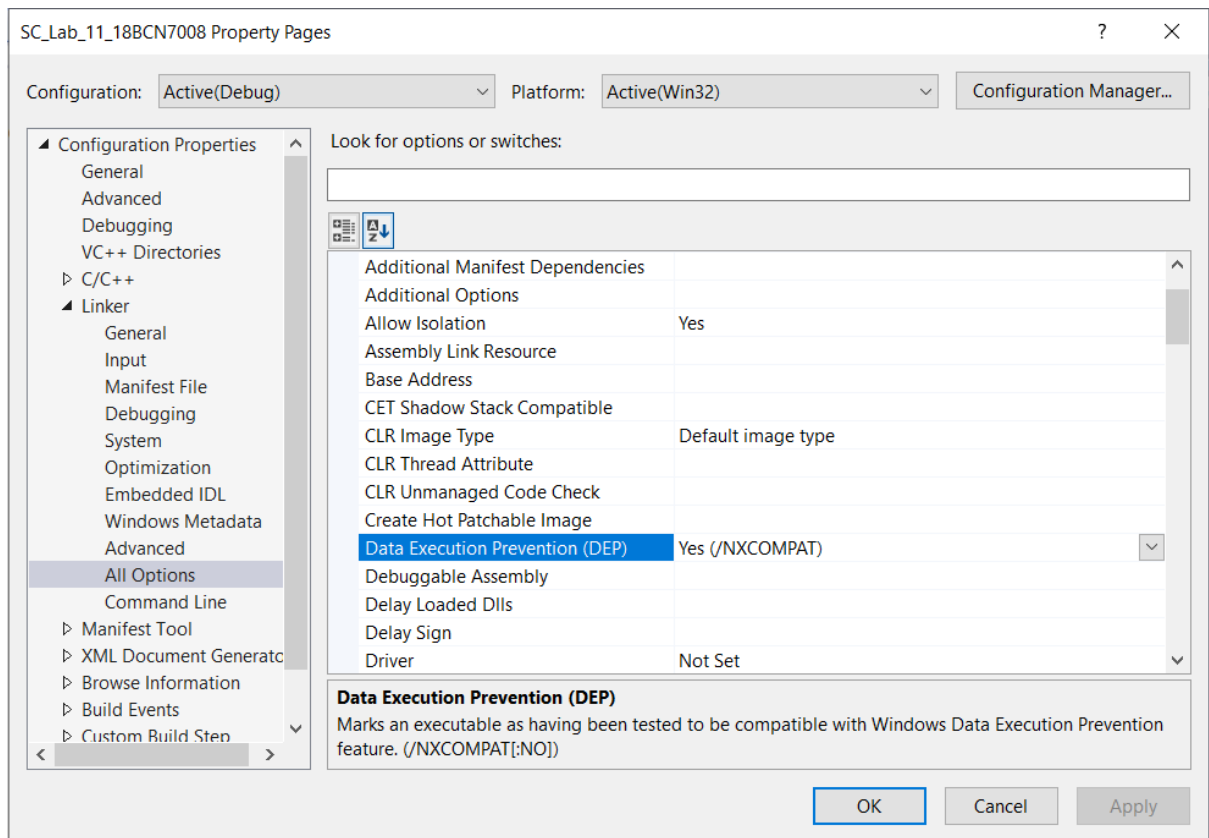# Secure Coding Lab - 11

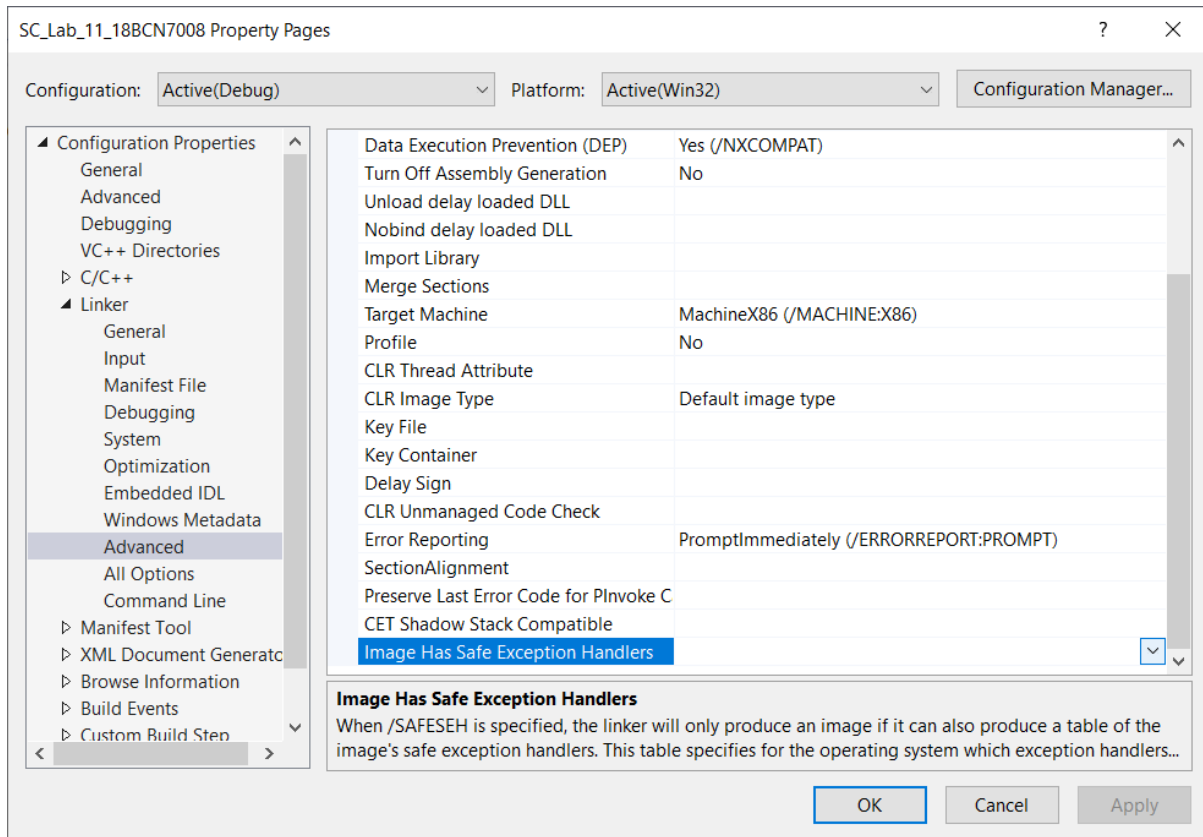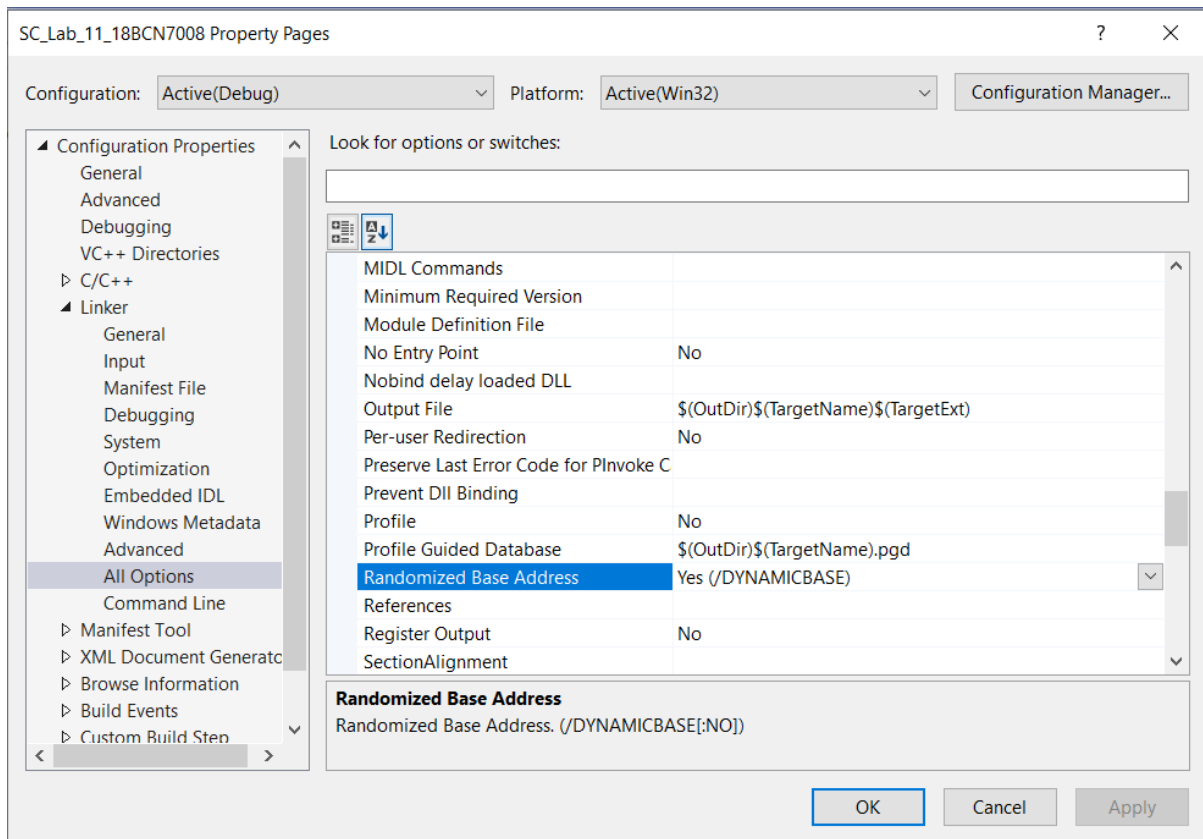Name : Rushik kumar Avula

Reg. No: 18BCN7008

After Downloading the Visual Studio and Process Explorer, creating the new project in visual Studio.

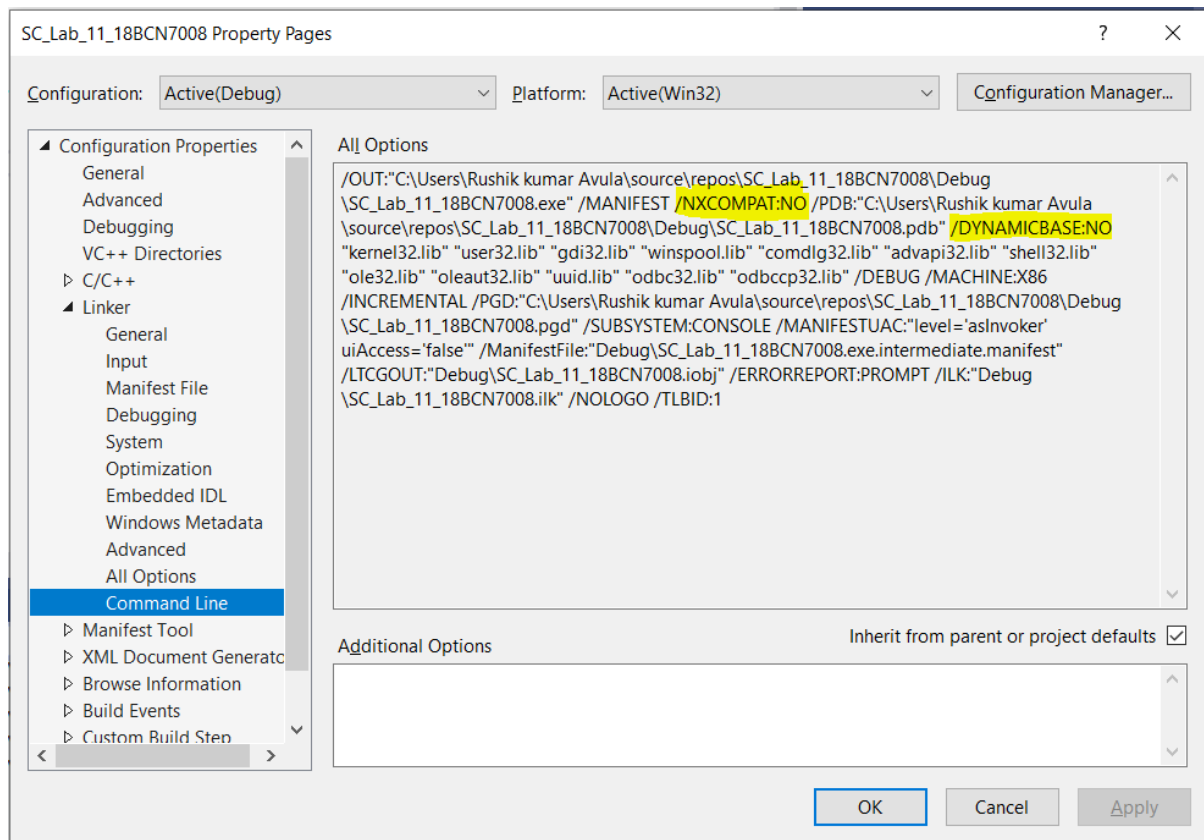Visiting properties of the project and verifying the DEP, ASLR and SEH properties.

SC_Lab_11_18BCN7008 Property Pages

Configuration: Active(Debug)   Platform: Active(Win32)   Configuration Manager...

Look for options or switches:

▲ 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 Generato
   ▷ Browse Information
   ▷ Build Events
   ▷ Custom Build Step

MIDL Commands	
Minimum Required Version	
Module Definition File	
No Entry Point	No
Nobind delay loaded DLL	
Output File	$(OutDir)$(TargetName)$(TargetExt)
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	

Randomized Base Address
Randomized Base Address. (/DYNAMICBASE[:NO])

OK   Cancel   Apply

SC_Lab_11_18BCN7008 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 Generato
   ▷ Browse Information
   ▷ Build Events
   ▷ Custom Build Step

Data Execution Prevention (DEP)	Yes (/NXCOMPAT)
Turn Off Assembly Generation	No
Unload delay loaded DLL	
Nobind delay loaded DLL	
Import Library	
Merge Sections	
Target Machine	MachineX86 (/MACHINE:X86)
Profile	No
CLR Thread Attribute	
CLR Image Type	Default image type
Key File	
Key Container	
Delay Sign	
CLR Unmanaged Code Check	
Error Reporting	PromptImmediately (/ERRORREPORT:PROMPT)
SectionAlignment	
Preserve Last Error Code for PInvoke C	
CET Shadow Stack Compatible	
Image Has Safe Exception Handlers	

Image Has Safe Exception Handlers
When /SAFESEH is specified, the linker will only produce an image if it can also produce a table of the image's safe exception handlers. This table specifies for the operating system which exception handlers...
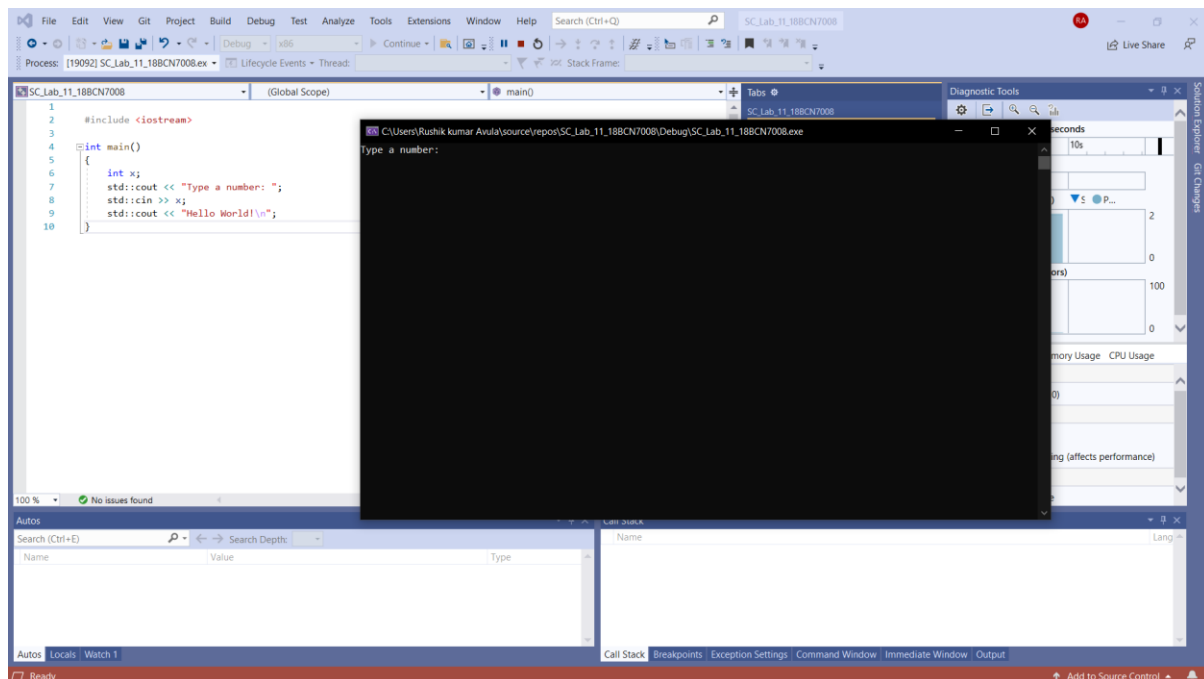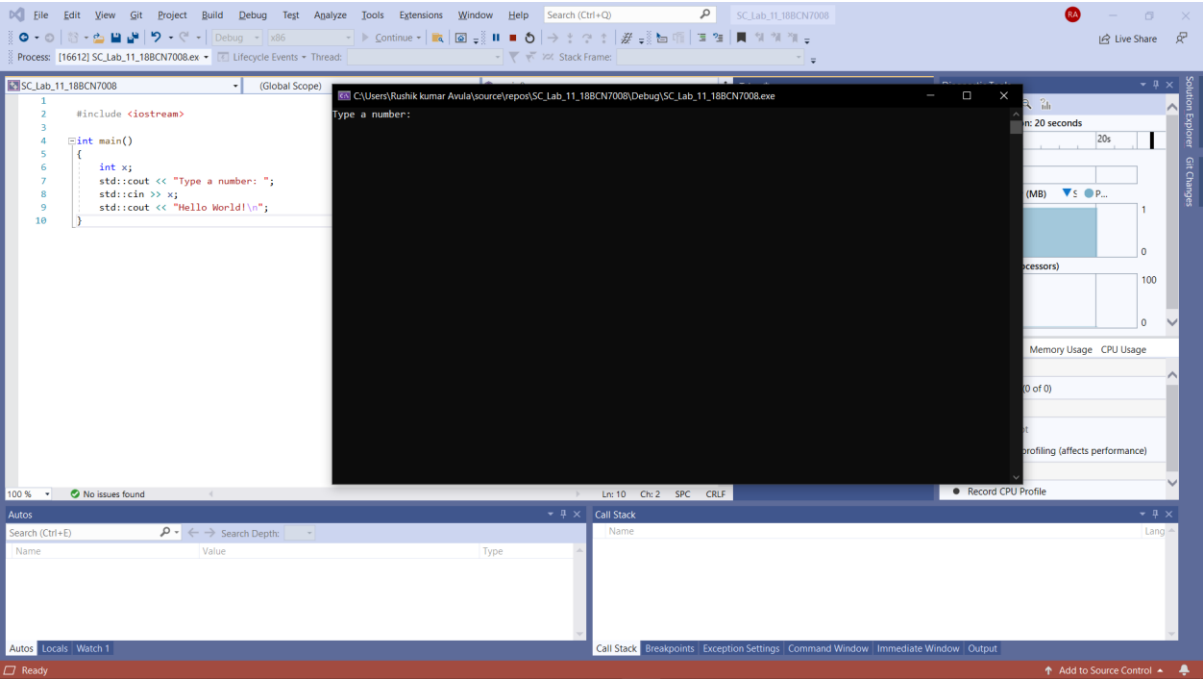
OK   Cancel   Apply

Now I changed the default options to NO for checking them in Process Explorer.

I run the CPP file to get the exe as follows :

Now I started the Process Explorer to check the DEP and ASLR status.

Again, I enabled the DEP and ASLR as well as SEH.

After Executing again :