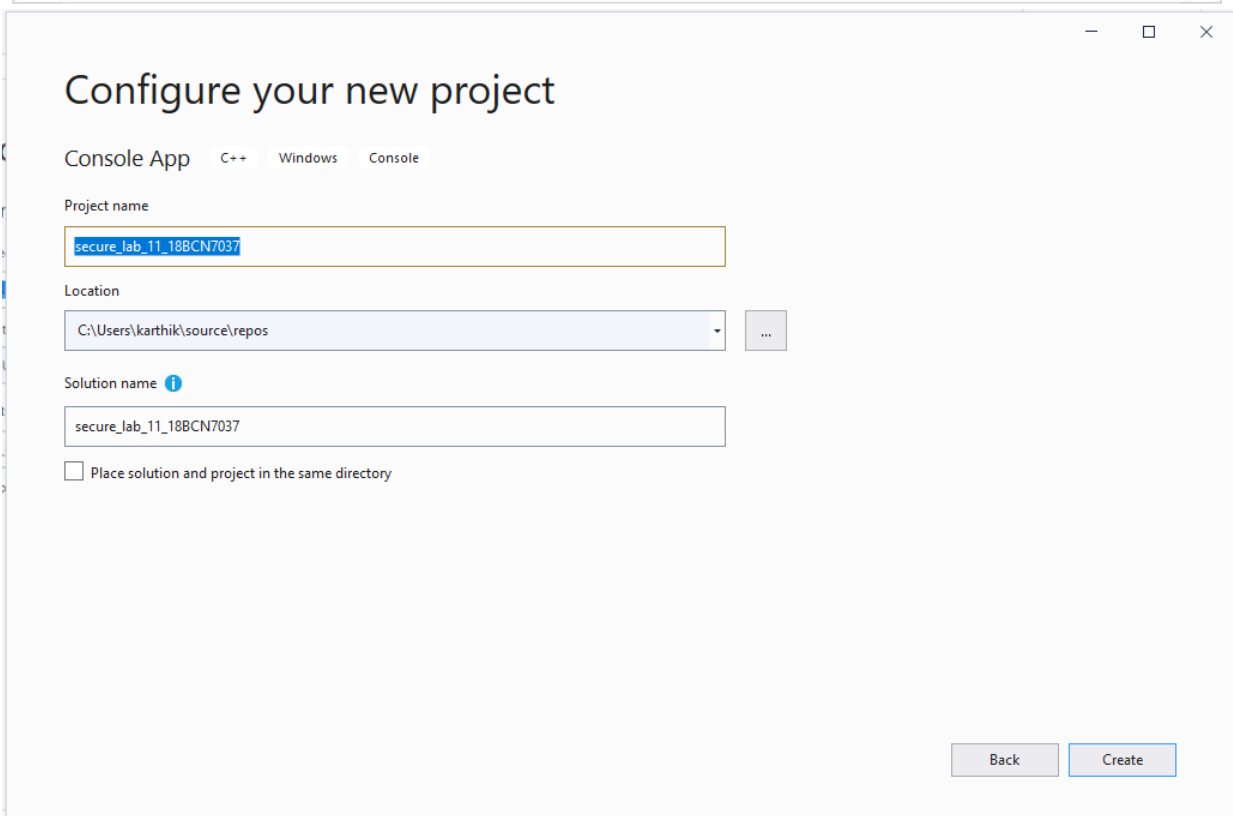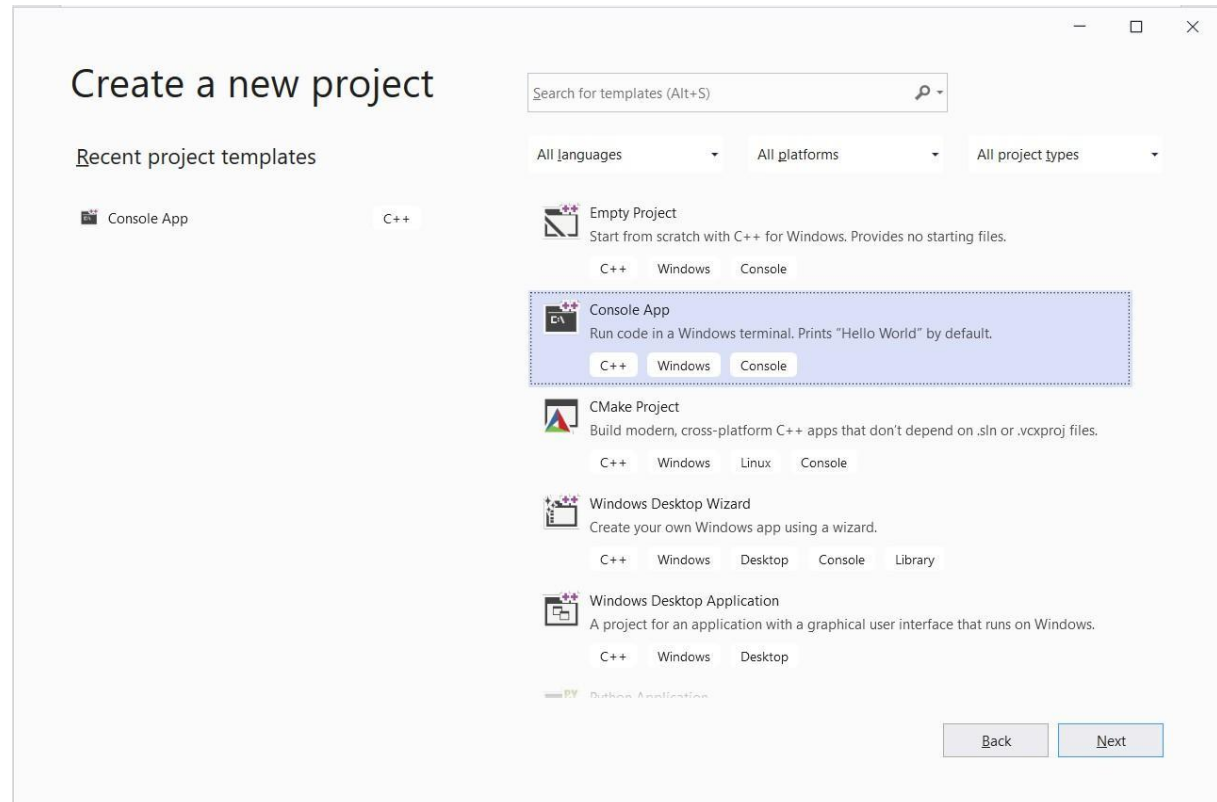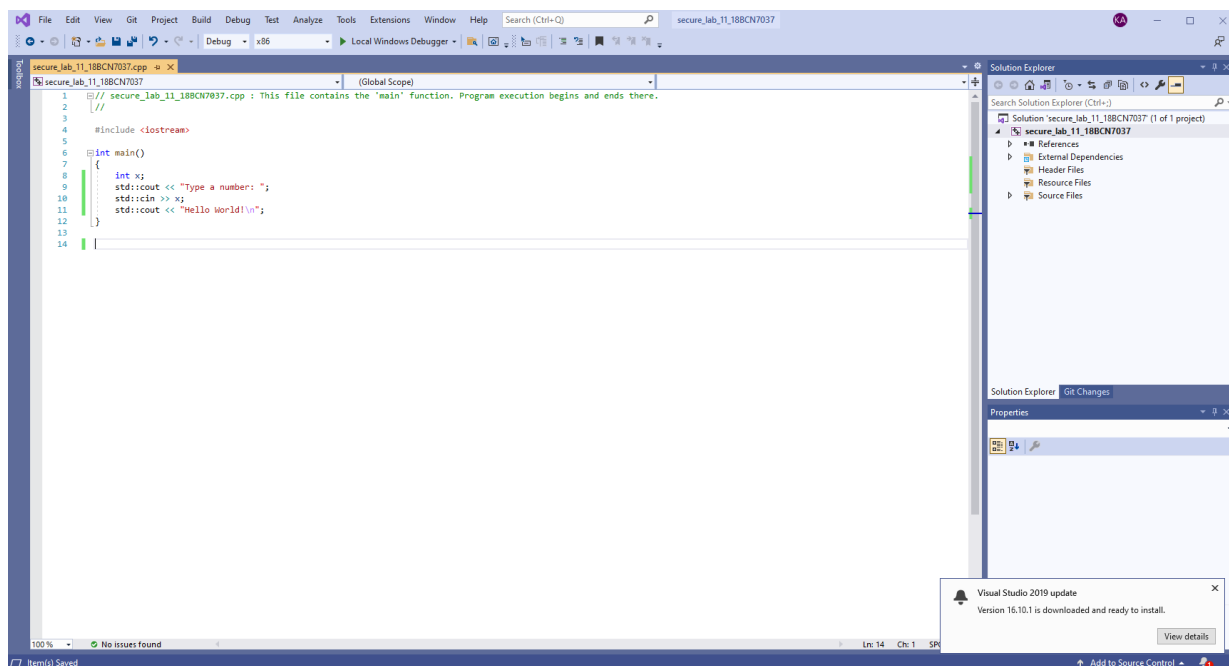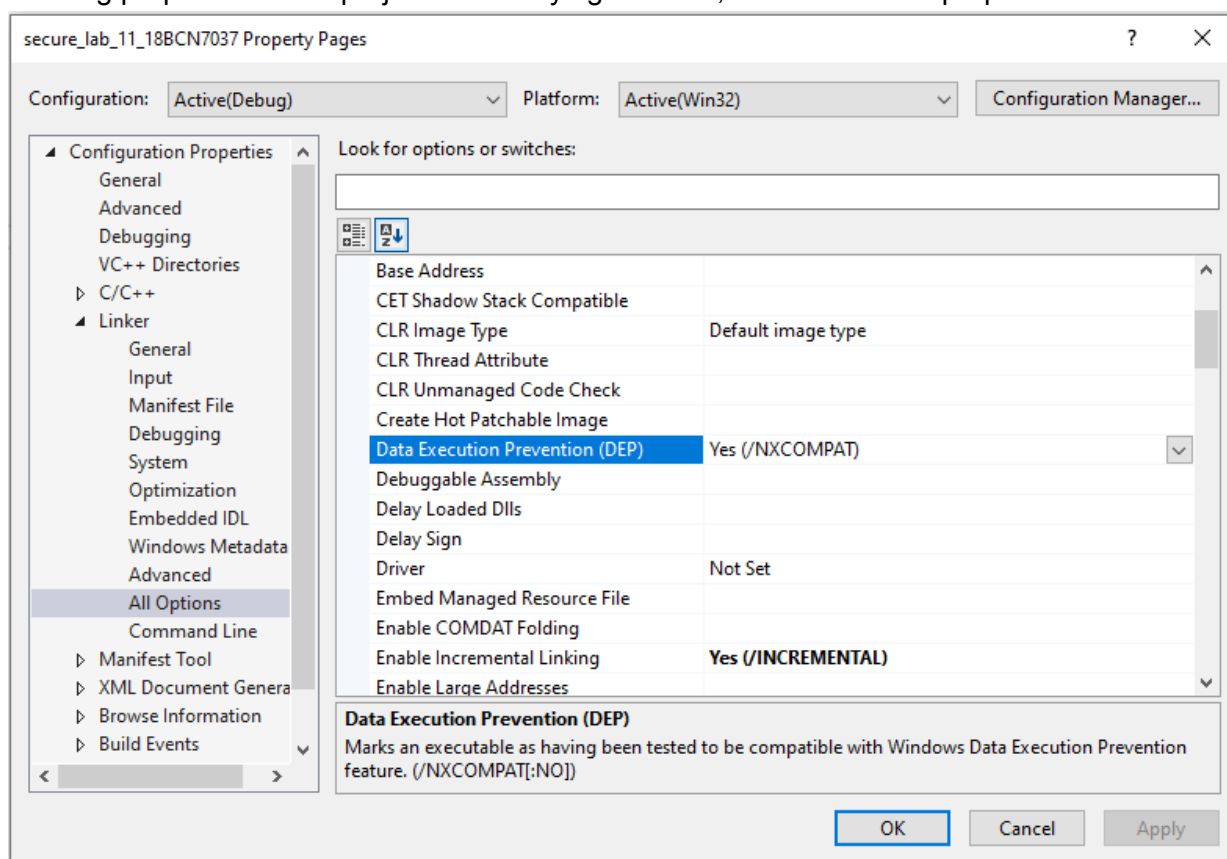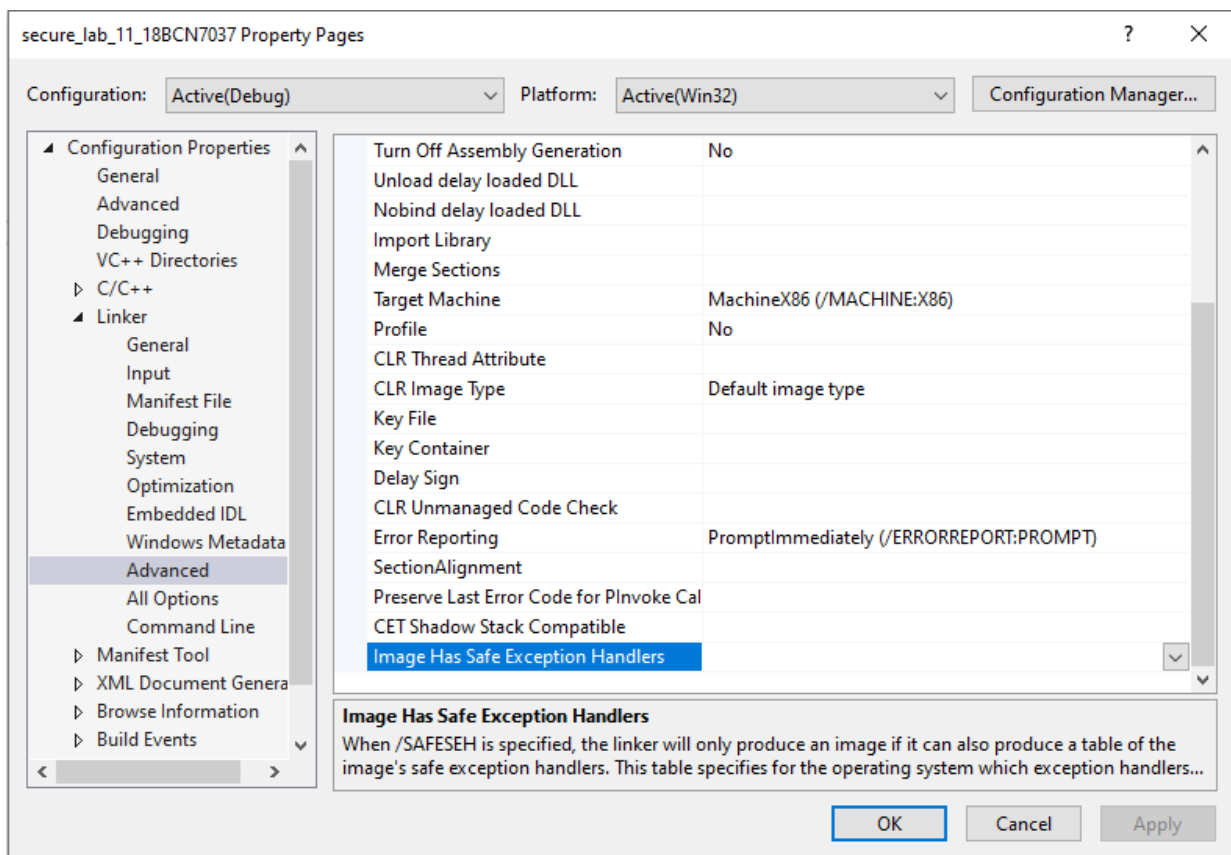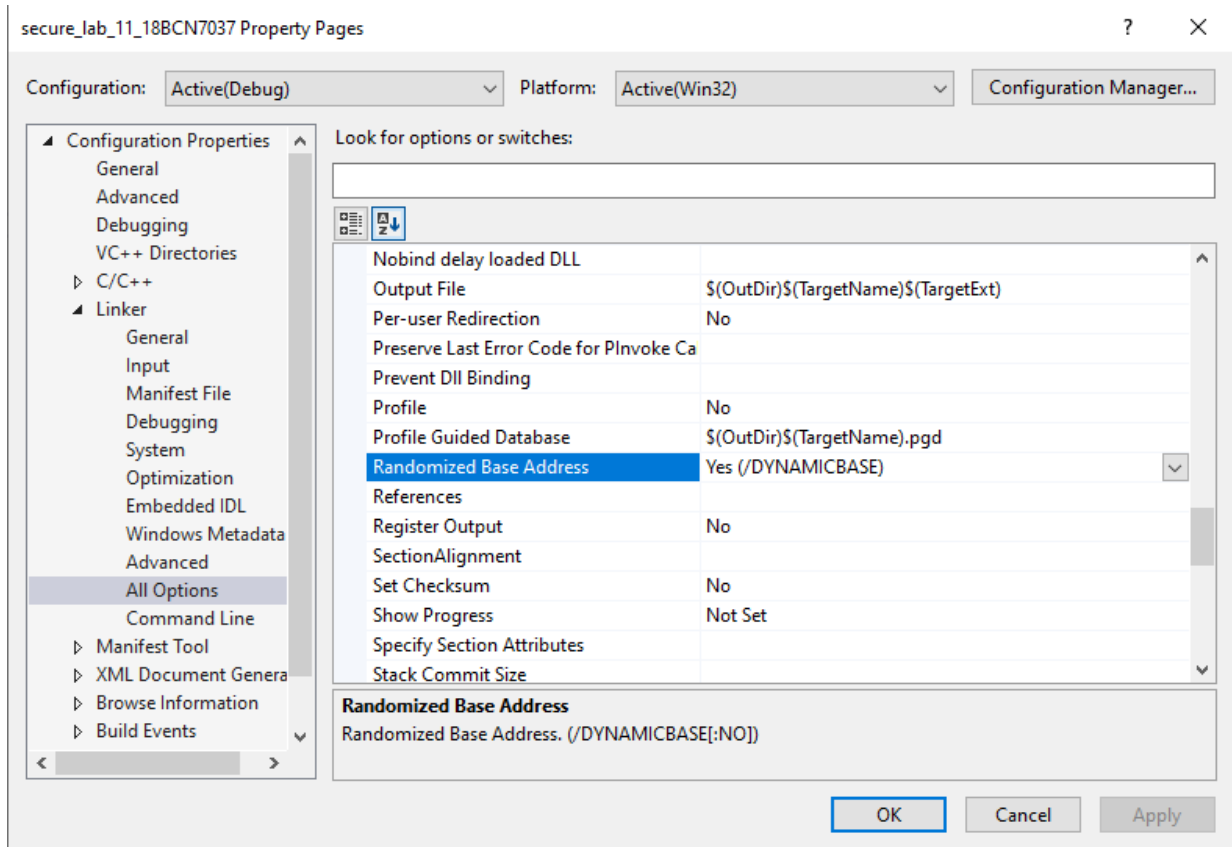Name : A.Karthik
Reg. No: 18BCN7037
After Downloading the Visual Studio and Process Explorer, creating the new project in visual Studio.

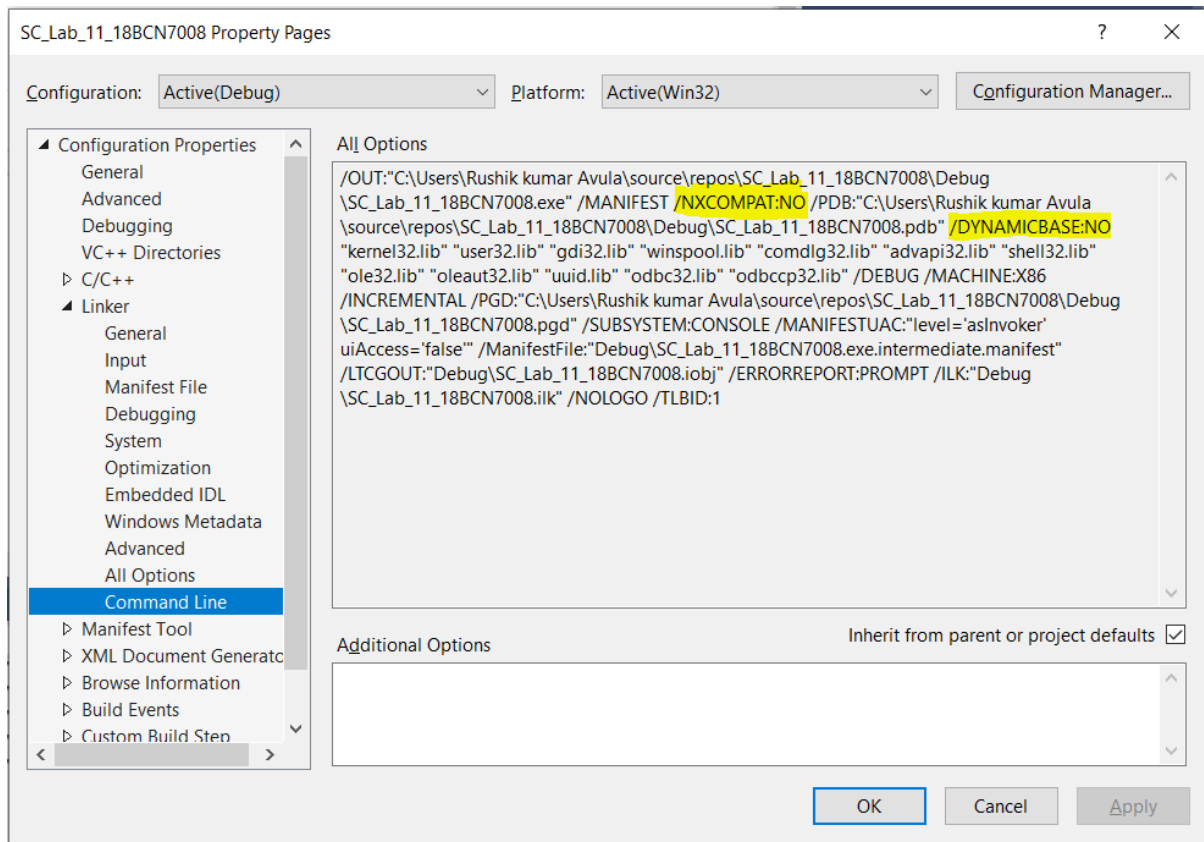Visiting properties of the project and verifying the DEP, ASLR and SEH properties.

## secure_lab_11_18BCN7037 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 Genera
  ▷ Browse Information
  ▷ Build Events

Look for options or switches:

| | |
|---|---|
| Nobind delay loaded DLL | |
| Output File | $(OutDir)$(TargetName)$(TargetExt) |
| Per-user Redirection | No |
| Preserve Last Error Code for PInvoke Ca | |
| 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 | |

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

OK   Cancel   Apply

---

## secure_lab_11_18BCN7037 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 Genera
  ▷ Browse Information
  ▷ Build Events

| | |
|---|---|
| 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 Cal | |
| 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...
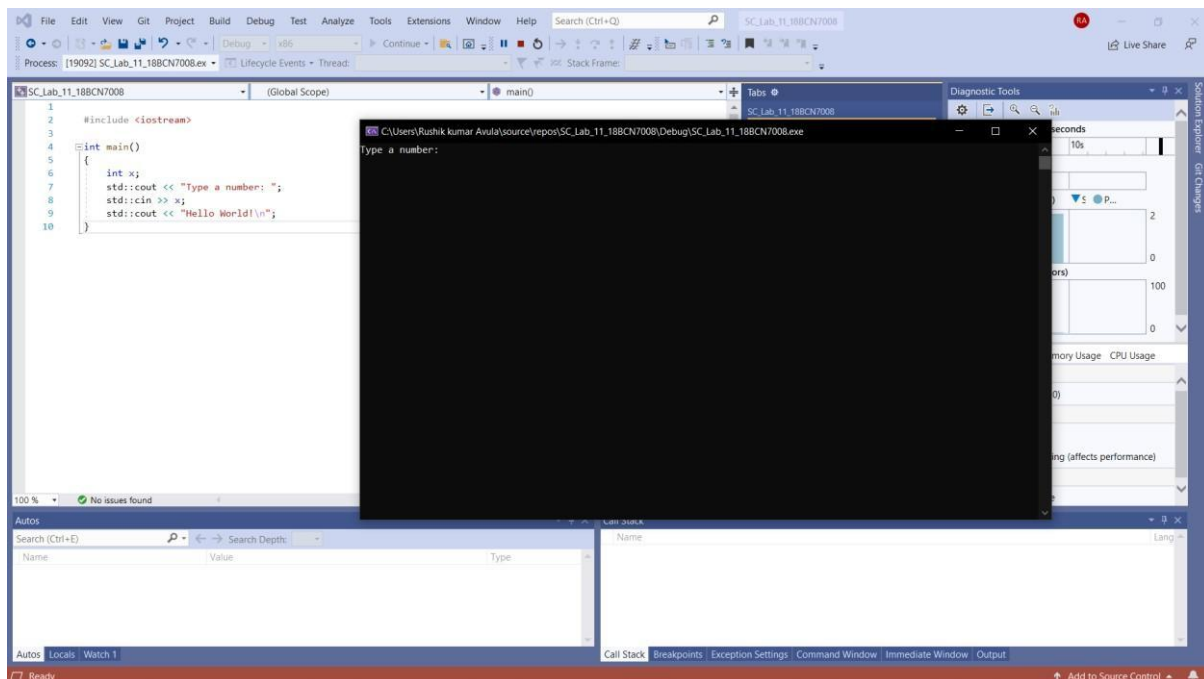
OK   Cancel   Apply

# 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.

| Process | CPU | Private Bytes | Working Set | PID | DEP | ASLR |
|---|---|---|---|---|---|---|
| SC_Lab_11_18BCN7008.exe | | 1,260 K | 4,752 K | 19092 | Disabled (permanent) | |

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

**After Executing again :**