

Embed License File into MSI

Modify MSI to place a license key file in the correct directory automatically.

About the Project:

The project focuses on modifying an MSI installer to embed a license file (license.key) into the appropriate installation directory. This ensures that when the application is installed, the license file is automatically placed in the specified folder without manual user intervention.

Before proceeding with this task, it is essential to install a few critical tools and dependencies to ensure a smooth and successful setup.

Requirements Before Starting:

Project Requirements:

1. Orca Editor (part of Windows SDK)
2. WiX Toolset (Wix314.exe)
3. Dummy MSI file (DummyProduct.msi)
4. Dummy License Key file (license.key)
5. Folder Structure:
Example: C:\Users\sachi\OneDrive\Documents\Project2
6. File Size in Bytes (for license.key)
7. Developer Command Prompt
8. Basic text editor (Notepad)

➤ Tasks Performed:

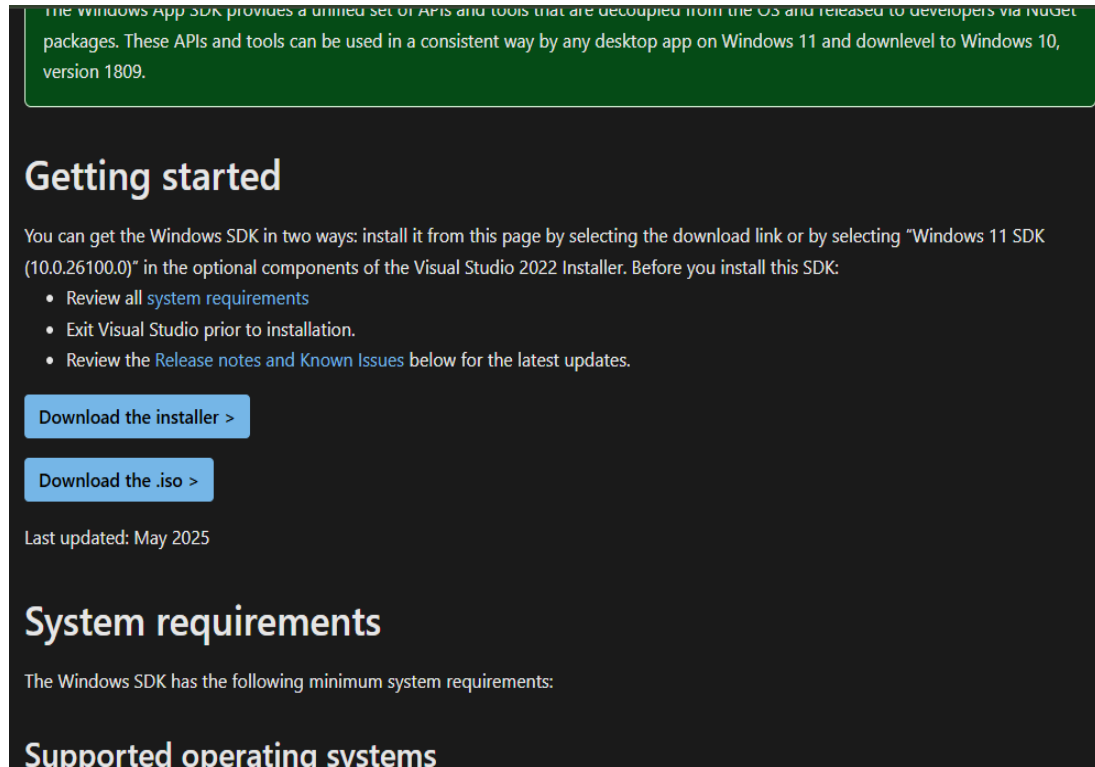
Performed on a local Windows machine with tools like Orca and WiX Toolset:

- Installed Orca via Windows SDK
- Installed WiX Toolset
- Created and configured .wxs file
- Built updated MSI via command line
- Embedded license.key using Orca
- Tested final MSI output

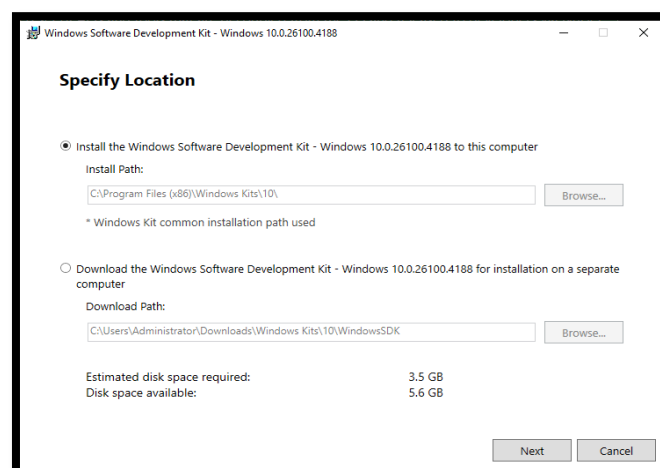
Step 1: Orca Installation steps:

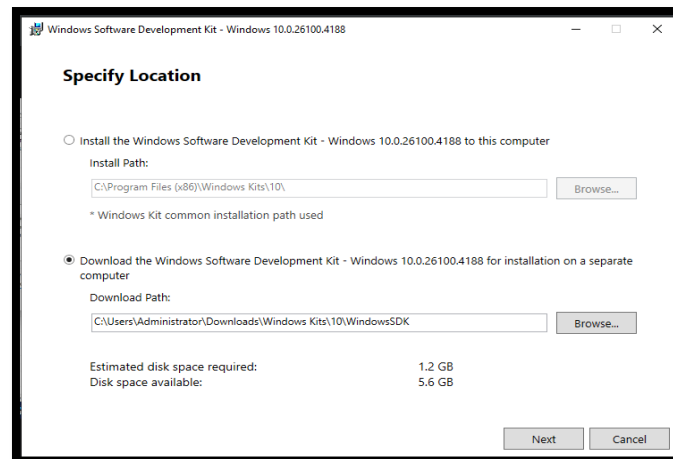
- a. Click on download the installer

Open <https://developer.microsoft.com/en-us/windows/downloads/windows-sdk/> and click **Download the installer** to download **winsdksetup.exe**

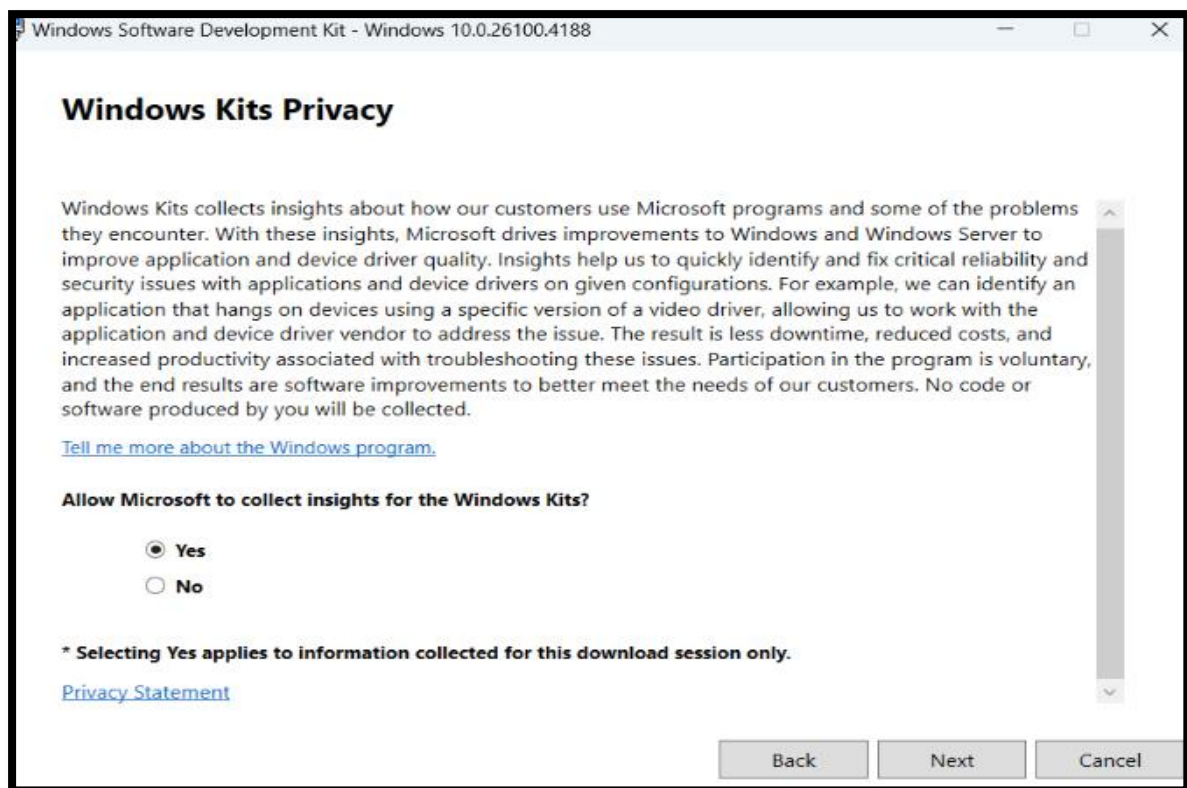


- b. Select the second **radio button** and browse path then download..... then NEXT

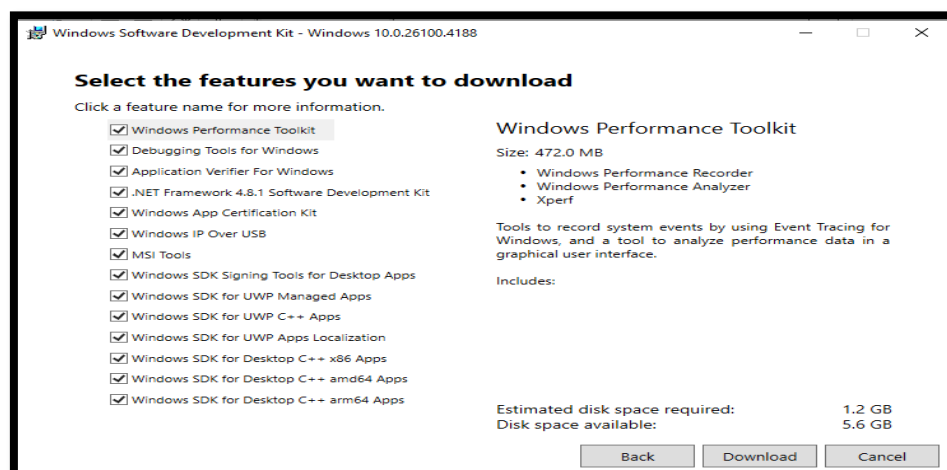




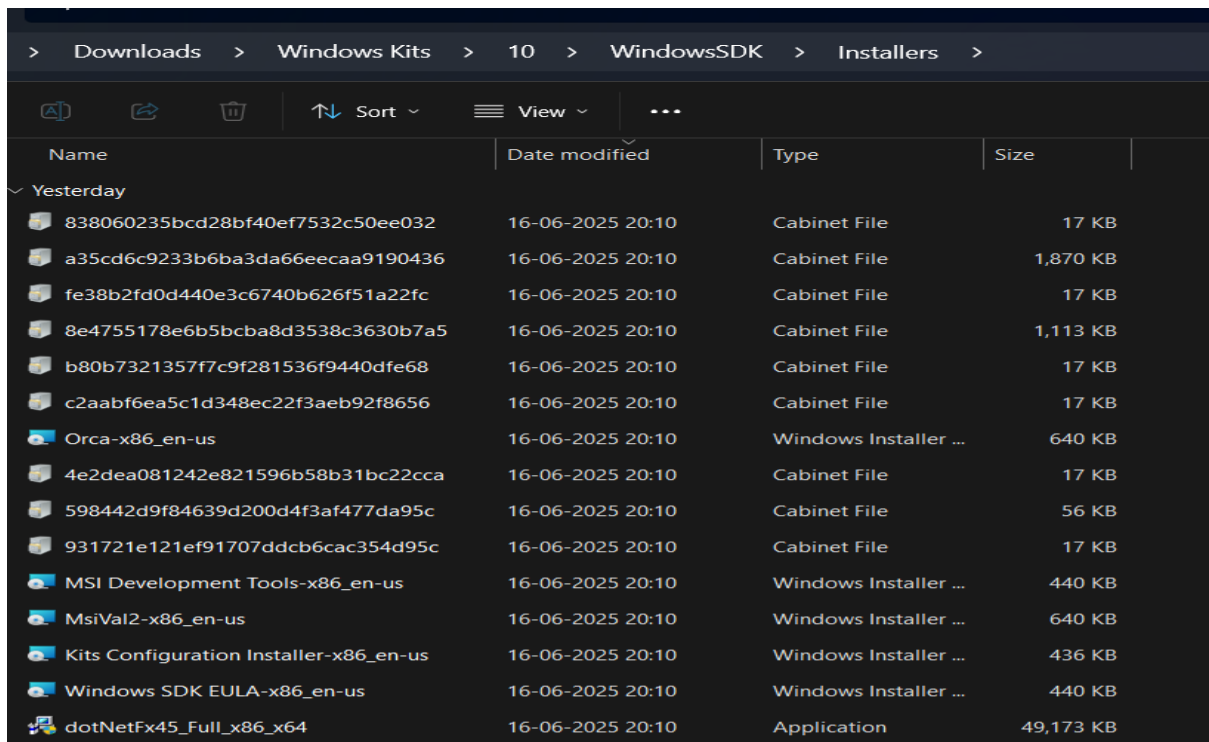
Click on YES



c. Select all the options and click on next->

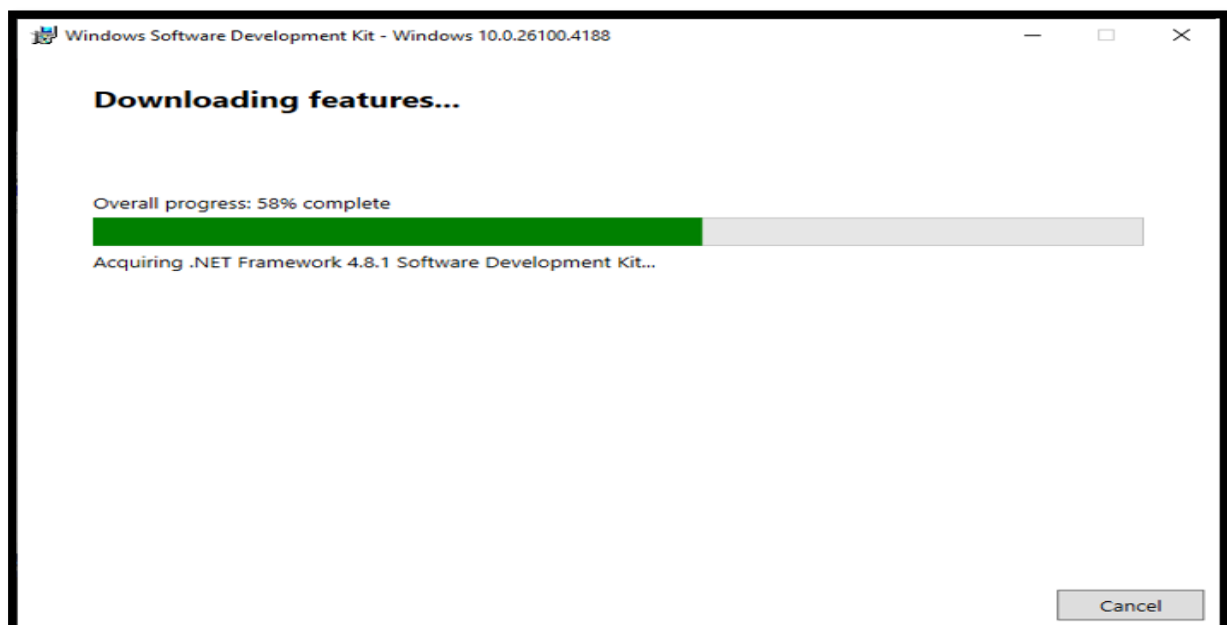


d. Double click on Orca-x86_en.msi ->Navigate to this path



Name	Date modified	Type	Size
Yesterday			
838060235bcd28bf40ef7532c50ee032	16-06-2025 20:10	Cabinet File	17 KB
a35cd6c9233b6ba3da66eecaa9190436	16-06-2025 20:10	Cabinet File	1,870 KB
fe38b2fd0d440e3c6740b626f51a22fc	16-06-2025 20:10	Cabinet File	17 KB
8e4755178e6b5bcba8d3538c3630b7a5	16-06-2025 20:10	Cabinet File	1,113 KB
b80b7321357f7c9f281536f9440dfe68	16-06-2025 20:10	Cabinet File	17 KB
c2aabf6ea5c1d348ec22f3aeb92f8656	16-06-2025 20:10	Cabinet File	17 KB
Orca-x86_en-us	16-06-2025 20:10	Windows Installer ...	640 KB
4e2dea081242e821596b58b31bc22cca	16-06-2025 20:10	Cabinet File	17 KB
598442d9f84639d200d4f3af477da95c	16-06-2025 20:10	Cabinet File	56 KB
931721e121ef91707ddcb6cac354d95c	16-06-2025 20:10	Cabinet File	17 KB
MSI Development Tools-x86_en-us	16-06-2025 20:10	Windows Installer ...	440 KB
MsiVal2-x86_en-us	16-06-2025 20:10	Windows Installer ...	640 KB
Kits Configuration Installer-x86_en-us	16-06-2025 20:10	Windows Installer ...	436 KB
Windows SDK EULA-x86_en-us	16-06-2025 20:10	Windows Installer ...	440 KB
dotNetFx45_Full_x86_x64	16-06-2025 20:10	Application	49,173 KB

e. Downloading-----

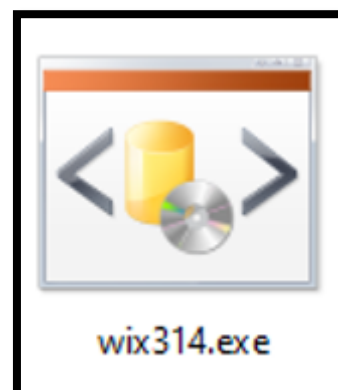


Step 2: wixtoolset Installation steps:

- a. Download **wix314.exe** from <https://github.com/wixtoolset/wix3/releases>
click on 3rd option wix314.exe



- b. Click on install in win314.exe file

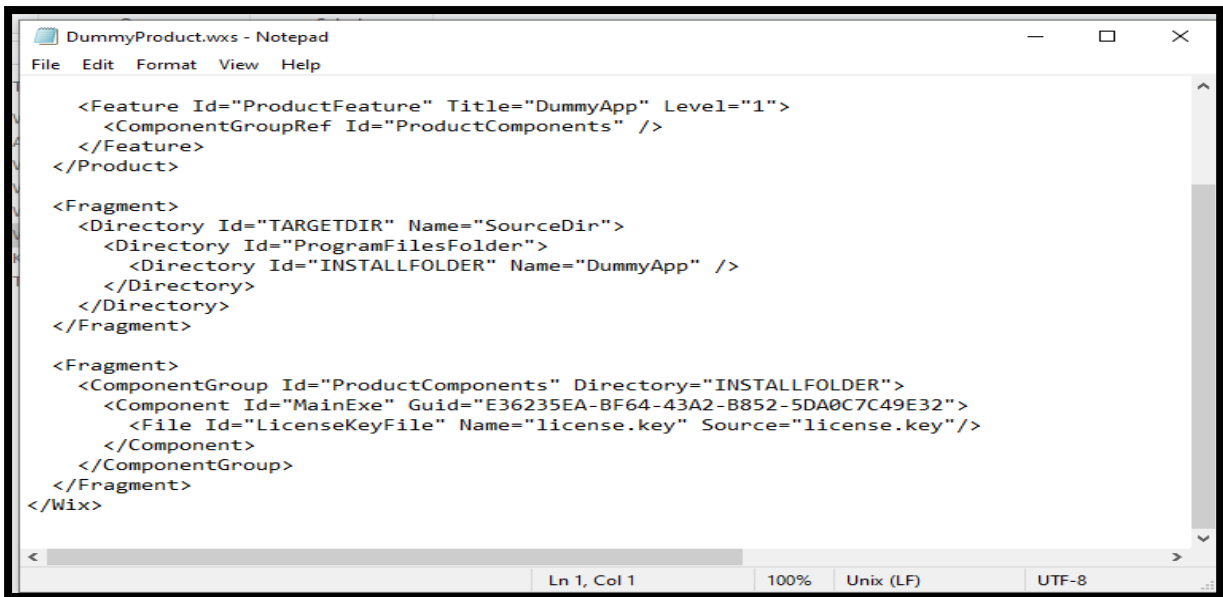


Step 3: Extract the dummy.msi file in the Project2 folder you can see three file here we can't see license file here till now

-> C:\Users\sachi\OneDrive\Documents\Project2

DummyApp.exe	6/16/2025 5:08 PM	Application	1 KB
DummyProduct.wxs	6/16/2025 5:08 PM	WXS File	2 KB
README.txt	6/16/2025 5:08 PM	Text Document	2 KB

-> Go to DummyProduct.wxs modify the file



```

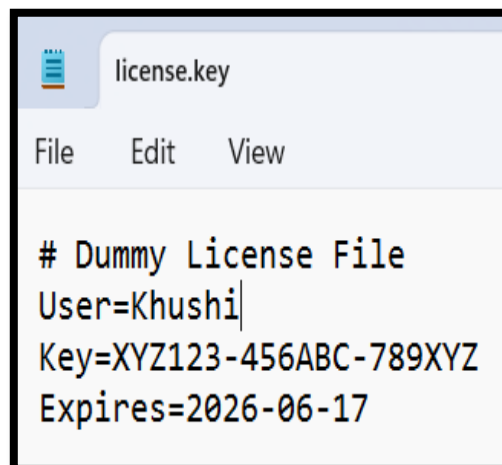
<Feature Id="ProductFeature" Title="DummyApp" Level="1">
  <ComponentGroupRef Id="ProductComponents" />
</Feature>
</Product>

<Fragment>
  <Directory Id="TARGETDIR" Name="SourceDir">
    <Directory Id="ProgramFilesFolder">
      <Directory Id="INSTALLFOLDER" Name="DummyApp" />
    </Directory>
  </Directory>
</Fragment>

<Fragment>
  <ComponentGroup Id="ProductComponents" Directory="INSTALLFOLDER">
    <Component Id="MainExe" Guid="E36235EA-BF64-43A2-B852-5DA0C7C49E32">
      <File Id="LicenseKeyFile" Name="license.key" Source="license.key"/>
    </Component>
  </ComponentGroup>
</Fragment>
</Wix>

```

Step 4: Open Notepad and create an dummy license key file and save it in the same directory Project2



```

# Dummy License File
User=Khushi|
Key=XYZ123-456ABC-789XYZ
Expires=2026-06-17

```

Step 5: Go to command prompt (run as administrator)

- First, go to the path where your dummy.msi exist in folder which you created names as Project2 in cmd

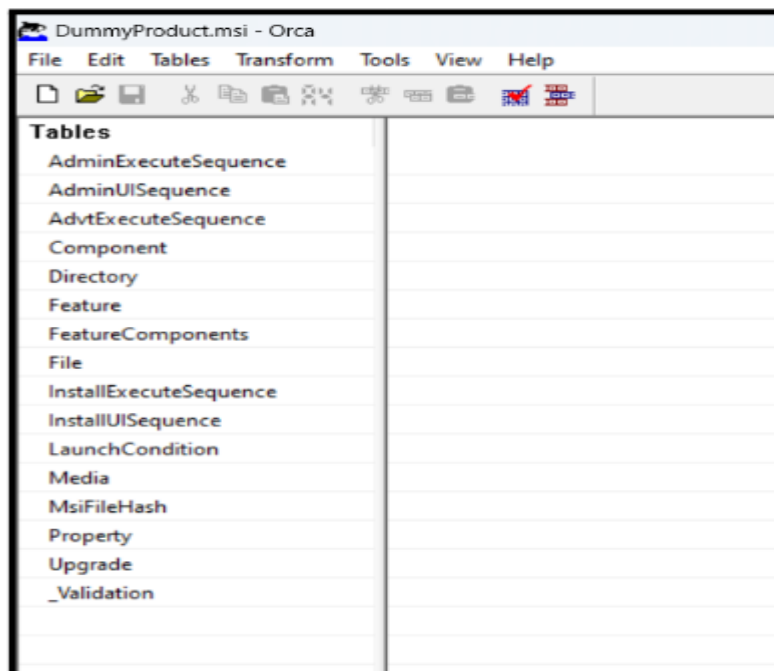
Run these commands from Developer Command Prompt (WiX Toolset must be installed):

1st command -> candle DummyProduct.wxs

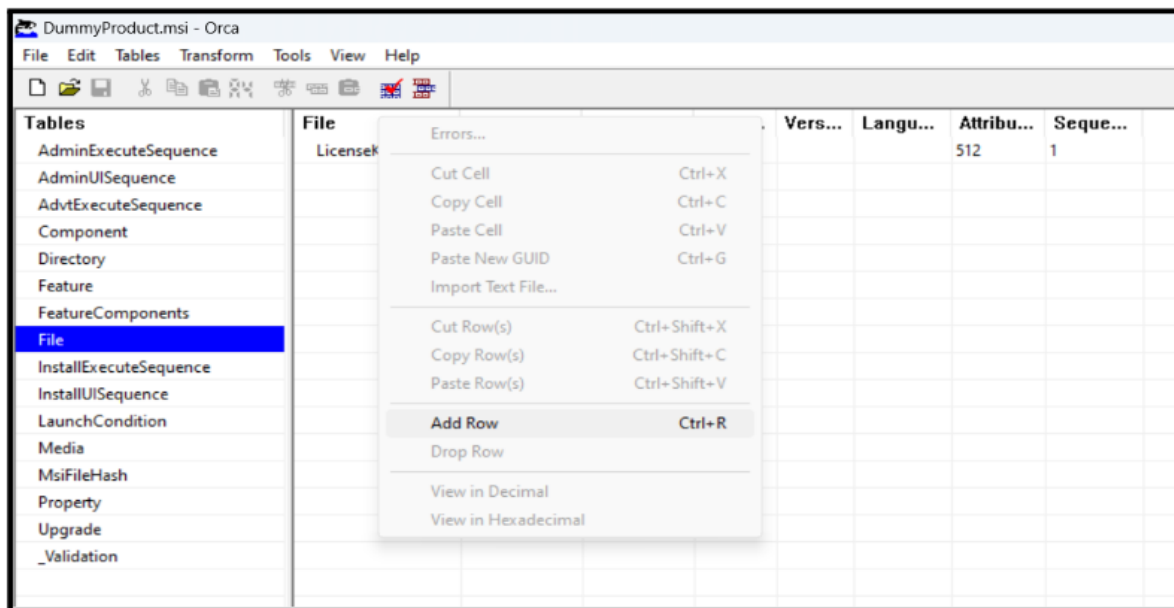
2nd command -> light DummyProduct.wixobj -o DummyProduct.msi

```
Administrator: Command Prompt
C:\Users\Administrator>cd/
C:\>cd Users
C:\Users>cd Administrator
C:\Users\Administrator>cd Documents
C:\Users\Administrator\Documents>cd "License project"
C:\Users\Administrator\Documents\License project>candle DummyProduct.wxs
Windows Installer XML Toolset Compiler version 3.14.1.8722
Copyright (c) .NET Foundation and contributors. All rights reserved.
DummyProduct.wxs
C:\Users\Administrator\Documents\License project>light DummyProduct.wixobj -o DummyProduct.msi
Windows Installer XML Toolset Linker version 3.14.1.8722
Copyright (c) .NET Foundation and contributors. All rights reserved.
C:\Users\Administrator\Documents\License project>_
```

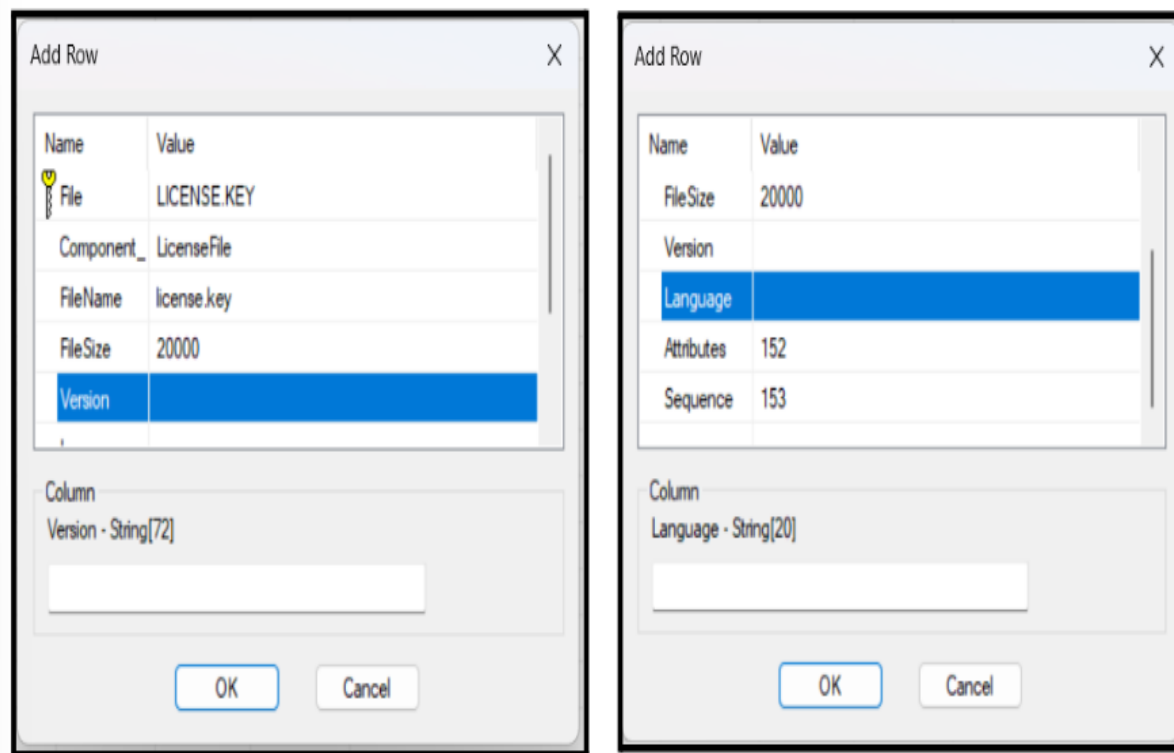
Step 6: Open Orca inside that go to file and then open dummy.msi file in orca



Step 7: Click on **File** where left box is there and then one more box will open then **add row**



Step 8: Put the information according to the .wxv file DummyProduct.wxv



->Then right click on File 1st column and click on add row option and add one row

->Add one row as shown below

File	Compone...	FileName	FileS...	Vers...	Langu...	Attribu...	Seque..
LICENSE.KEY	LicenseFile	license.key	20000			512	513

Step 9: Save the .msi file DummyProduct.msi

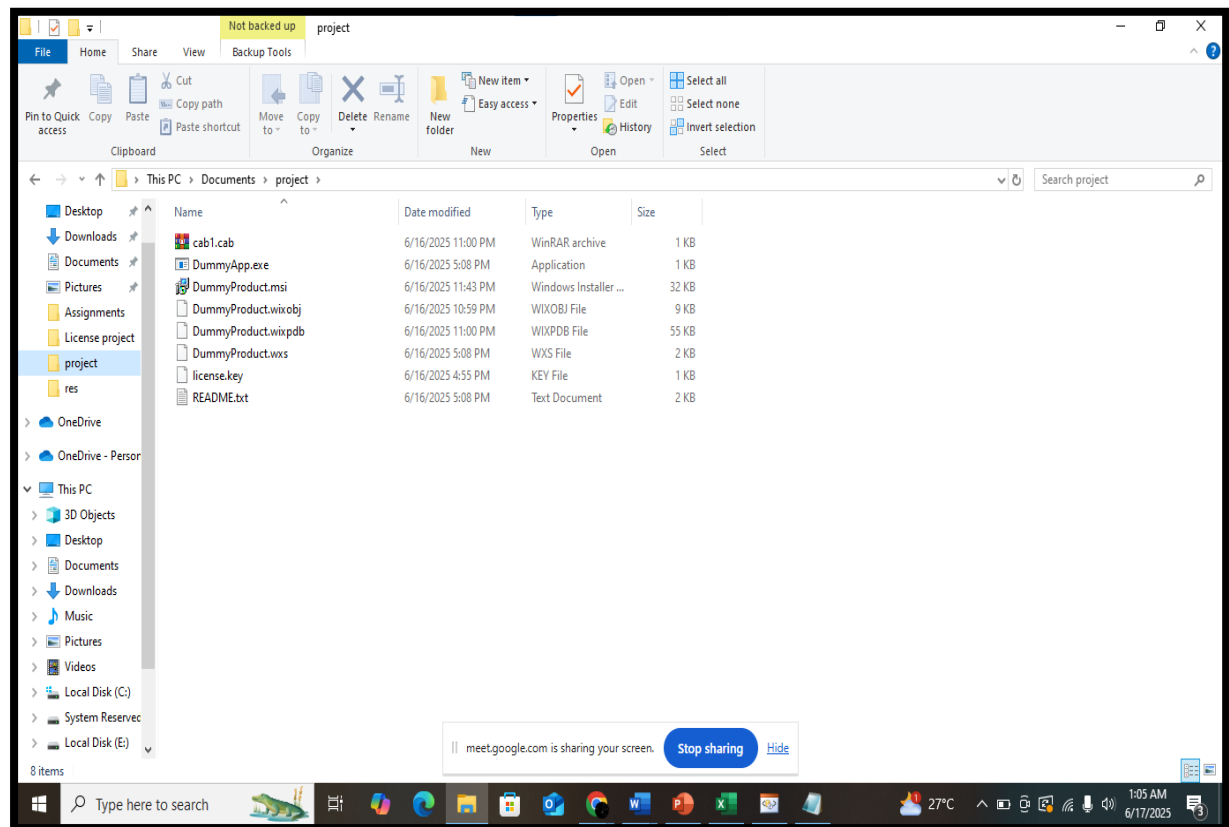
DummyProduct.msi - Orca

File Edit Tables Transform Tools View Help

Tables	File	Compone...	FileName	FileS...	Vers...	Langu...	Attribu...	Seque...
AdminExecuteSequence	LicenseKeyFile	LicenseFile	license.key	81			512	1
AdminUISequence	LICENSE.KEY	LicenseFile	license.key	20000			152	153
AdvtExecuteSequence								
Component								
Directory								
Feature								
FeatureComponents								
File								
InstallExecuteSequence								
InstallUISequence								
LaunchCondition								
Media								
MsiFileHash								
Property								
Upgrade								
_Validation								

->Save and close

Step 10: Now open program file and see the final result



Analysis Result:

- **Success:** License file placed correctly
- MSI functions normally with embedded license
- Verified by reinstallation and folder check

Technologies/Tools Used:

- Orca Editor
- WiX Toolset (Candle & Light)
- PowerShell/Command Prompt
- Windows 10
- Notepad