

Add File Associations via MSI

01) What is msi :- An MSI file (Microsoft Installer file) is a special type of installation package used on Windows to install, update, or uninstall software. It uses the Windows Installer service (msiexec.exe) to manage the process.

Msi file contains Files to be installed, Installation instructions, Registry changes, Shortcuts, Custom actions and Uninstall information

02) What is a file associations : A file association links a file extension (like .txt, .jpg, or .mp4) with a default program that can open it.

For example:

.txt → opens with Notepad

.jpg → opens with Photos

.mp4 → opens with Movies & TV (or VLC, if installed)

03) Goal : Main goal of this project is a file associations to a application using msi file.

I am going to use firefox msi file for file association with file extentions like .vishu,.cpp,.ram.

You can download firefox msi from [here](#).

04) Tool used : there are many ways and tools available in he markey for file association , Like : Advance installer GUI, Orca Tool, instead.but o have used orca for msi file association.

Orca Tool : Orca is a free Windows Installer package editor from Microsoft. It lets you directly view and edit the internal database tables of .msi including setting file associations, modifying components, registry entries, shortcuts, and more.

You can download orca sdk tool from [link](#).

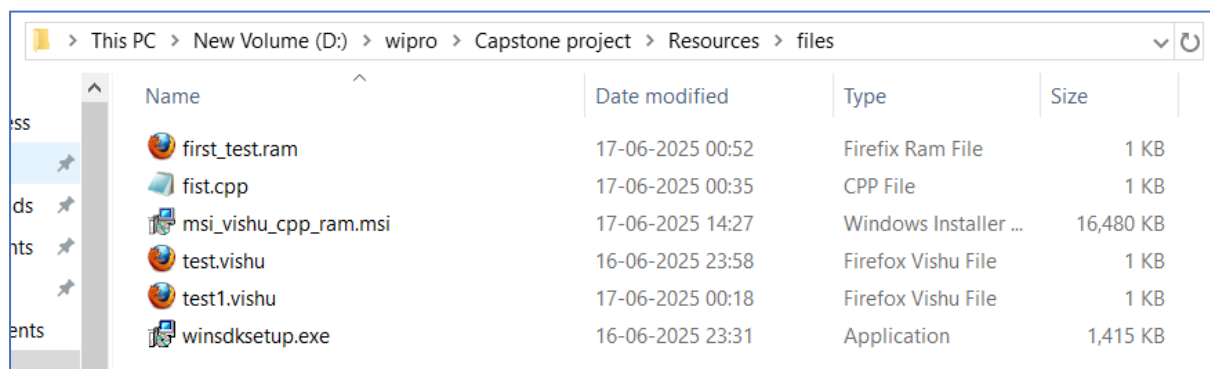
After download you will see a **winsdksetup.exe** file.

wipro_23VID1994_DWS - Batch 1 - Writel...	16-06-2025 23:31	MICROSOFT EXCEL W...	15 KB
winsdksetup.exe	16-06-2025 23:31	Application	1,415 KB

05) Project Requirements :

To complete this project, the following tools and files are needed:

- ❖ Windows Operating System (Windows 10 or 11)
- ❖ Windows SDK (to install the Orca tool)
- ❖ Orca Tool (used to edit the MSI file)
- ❖ Firefox MSI File (e.g., Firefox.msi)
- ❖ Basic knowledge of how MSI files work
- ❖ Notepad (to create a .vishu,.ram test file)
- ❖ Files with custom extensions. (like .ram .vishu .cpp)
- ❖ Admin rights (to install SDK and run MSI)



The screenshot shows a Windows File Explorer window with the address bar path: > This PC > New Volume (D:) > wipro > Capstone project > Resources > files. The left sidebar shows a tree view with folders like 'ss', 'ds', 'nts', and 'ents'. The main pane displays a table of files with columns for Name, Date modified, Type, and Size.

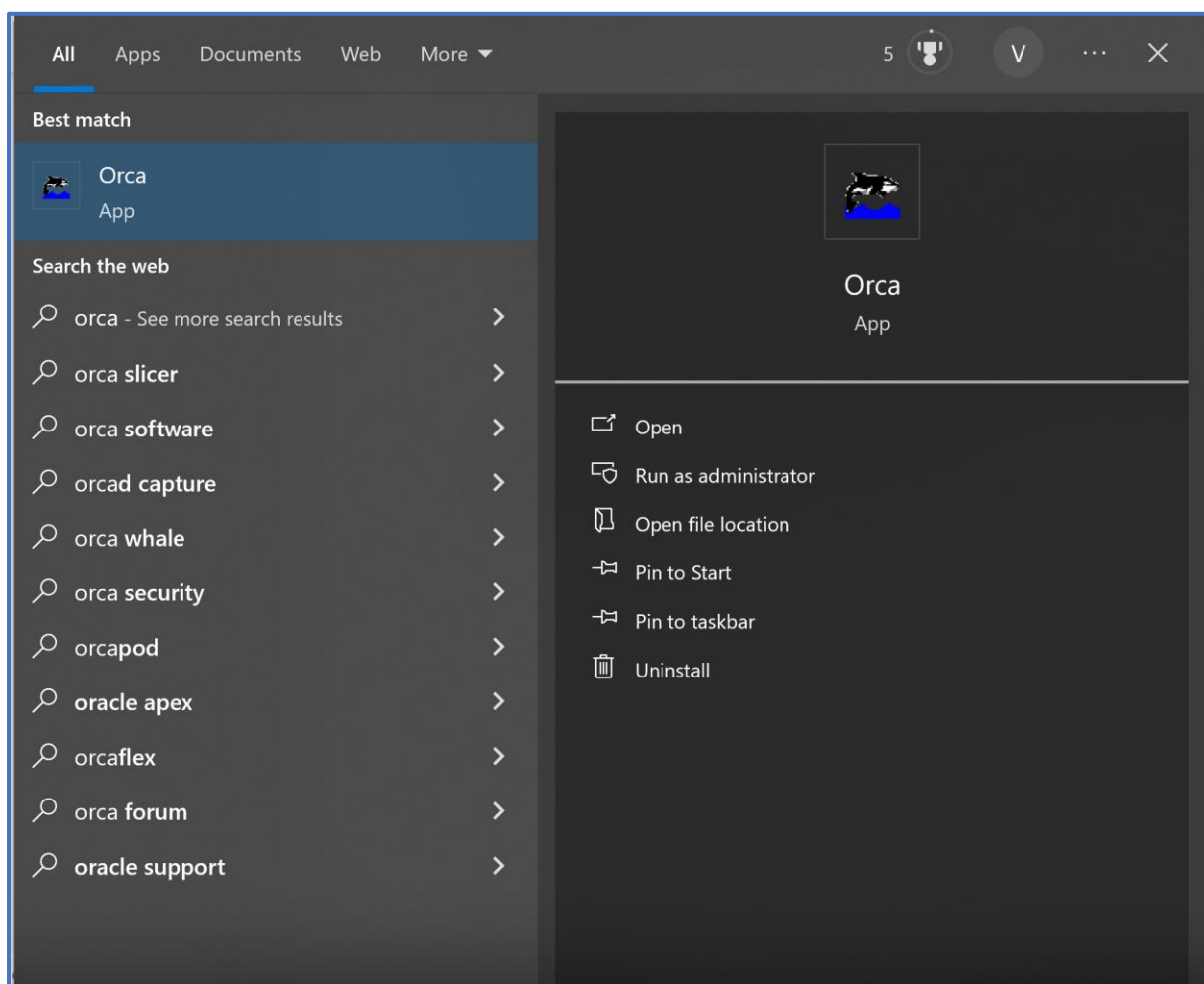
Name	Date modified	Type	Size
first_test.ram	17-06-2025 00:52	Firefox Ram File	1 KB
fist.cpp	17-06-2025 00:35	CPP File	1 KB
msi_vishu_cpp_ram.msi	17-06-2025 14:27	Windows Installer ...	16,480 KB
test.vishu	16-06-2025 23:58	Firefox Vishu File	1 KB
test1.vishu	17-06-2025 00:18	Firefox Vishu File	1 KB
winsdksetup.exe	16-06-2025 23:31	Application	1,415 KB

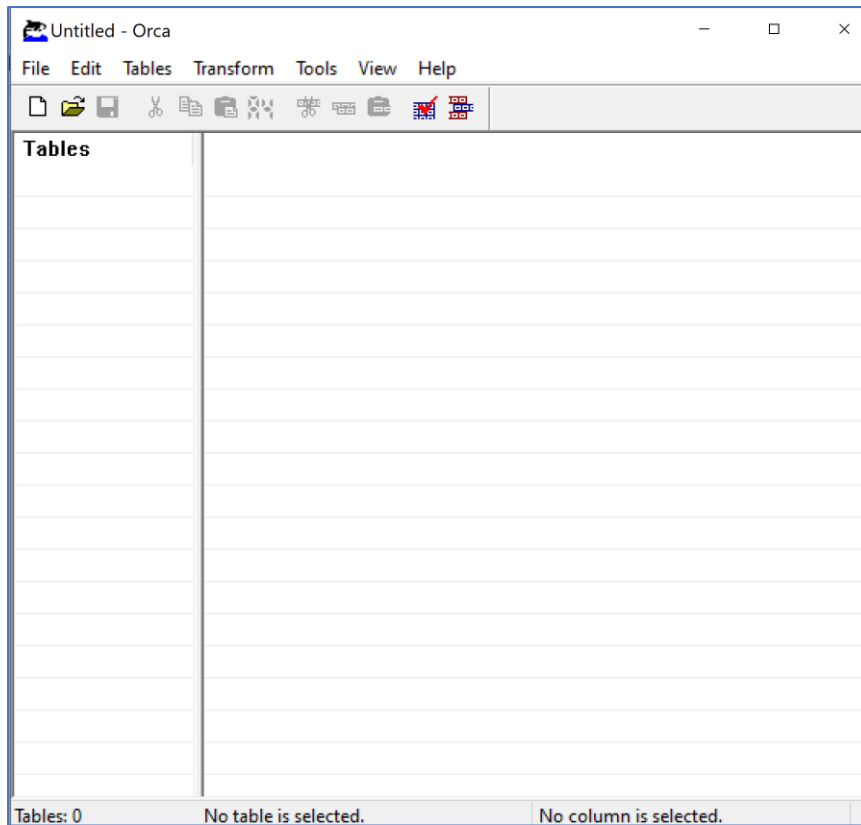
06) Steps to install Orca : double click or execute the winsdksetup.exe file ,which is downloaded recently.

Follow the installation wizard,your orca sdk will be installed at your specified location in installation wizard.

My orca sdk is downloaded at path : C:\Program Files (x86)\Windows Kits

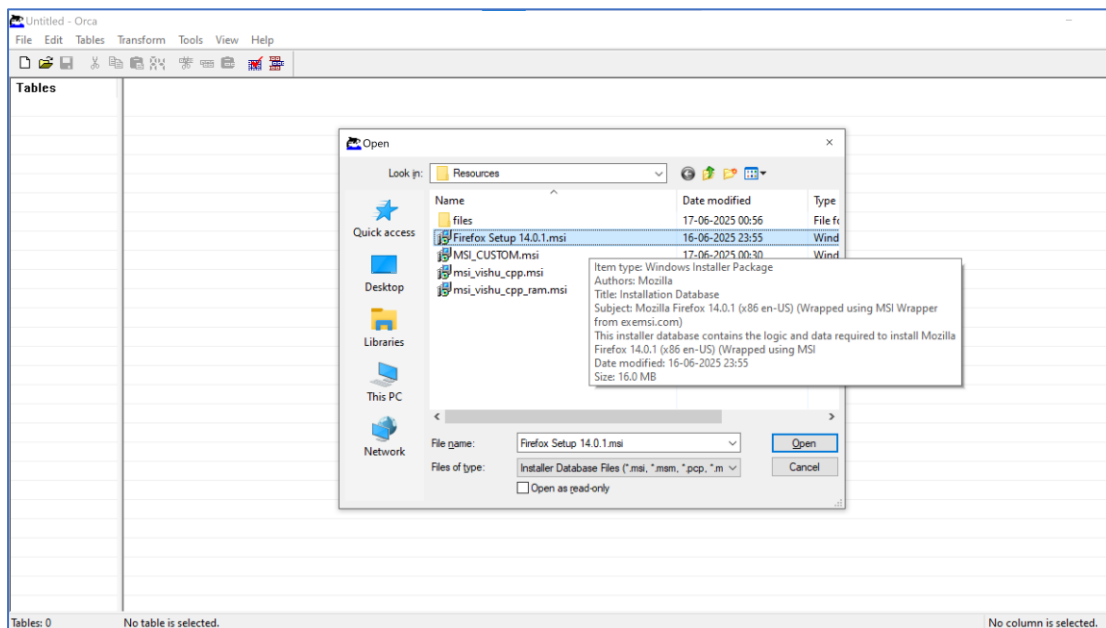
07) Steps to associate file with msi : first open Orca tool.



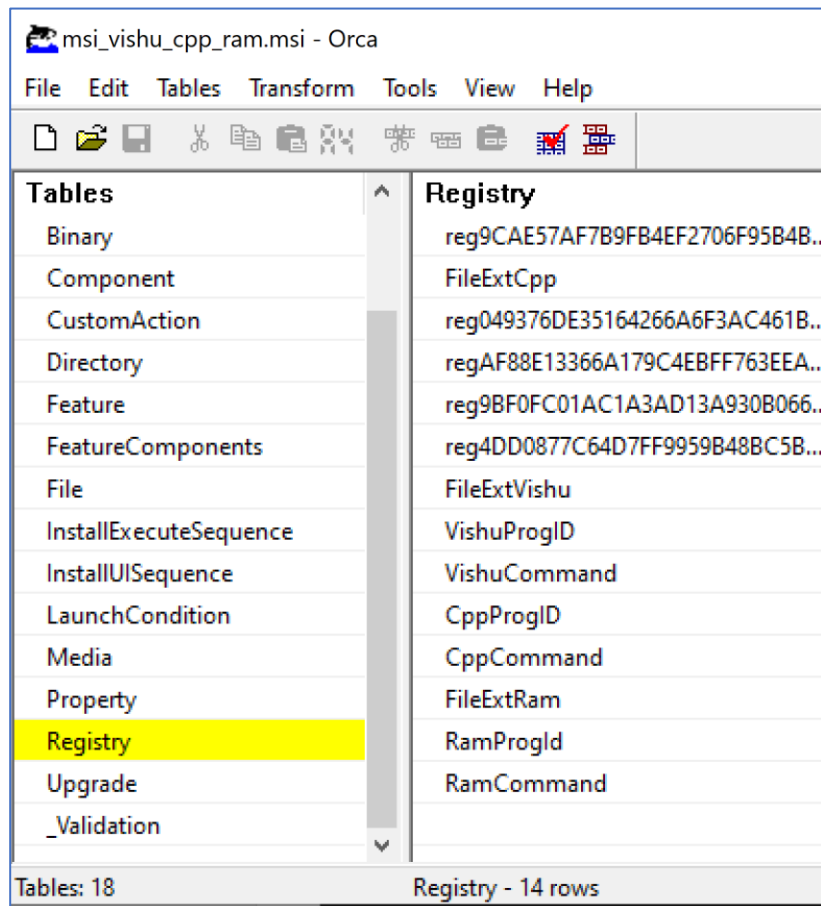


Open the msi file with which, you want to asocoate a custom files.

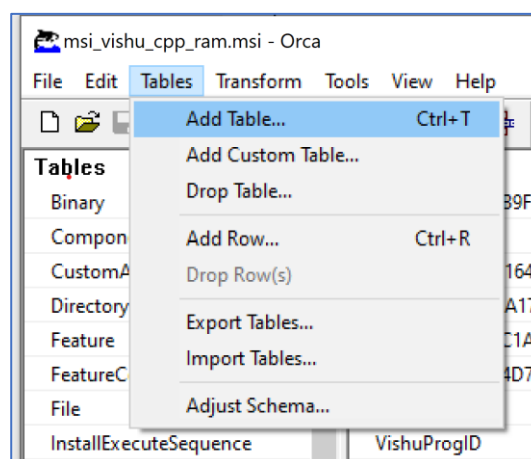
I am using firefox msi file.



After opening msi file succesfully, navigate to tables pane in left side and find for registry table and open it.



If there is no registry able then click on table meuu at tool bar and navigate to add Table and Check registry and click ok.



After opening registry table right click and select add row.

For one extension you have to add three registry values.

(File extension, Prog id and Command)

Add registry keys as below.

1. Registries for .vishu extention:

Registry	Root	Key	Value	Component
FileExtVishu	0	.vishu	FirefoxHTML.vishu	bz.ProductComponent
VishuProgID	0	FirefoxHTML.vishu	Firefox Vishu File	bz.ProductComponent
VishuCommand	0	FirefoxHTML.vishu\shell\open\command	"C:\Program Files (x86)\Mozilla Firefox\firefox.exe" "%1"	bz.ProductComponent

FileExtVishu	0	.vishu	FirefoxHTML.vishu	bz.ProductComp...
VishuProgID	0	FirefoxHTML.vishu	Firefox Vishu File	bz.ProductComp...
VishuCommand	0	FirefoxHTML.vish...	"C:\Program File...	bz.ProductComp...

2. Registries for .cpp extention

Registry	Root	Key	Value	Component
CppProgID	0	FirefoxHTML.cpp	Firefox CPP File	bz.ProductComponent
CppCommand	0	FirefoxHTML.cpp\shell\open\command	"C:\Program Files (x86)\Mozilla Firefox\firefox.exe" "%1"	bz.ProductComponent

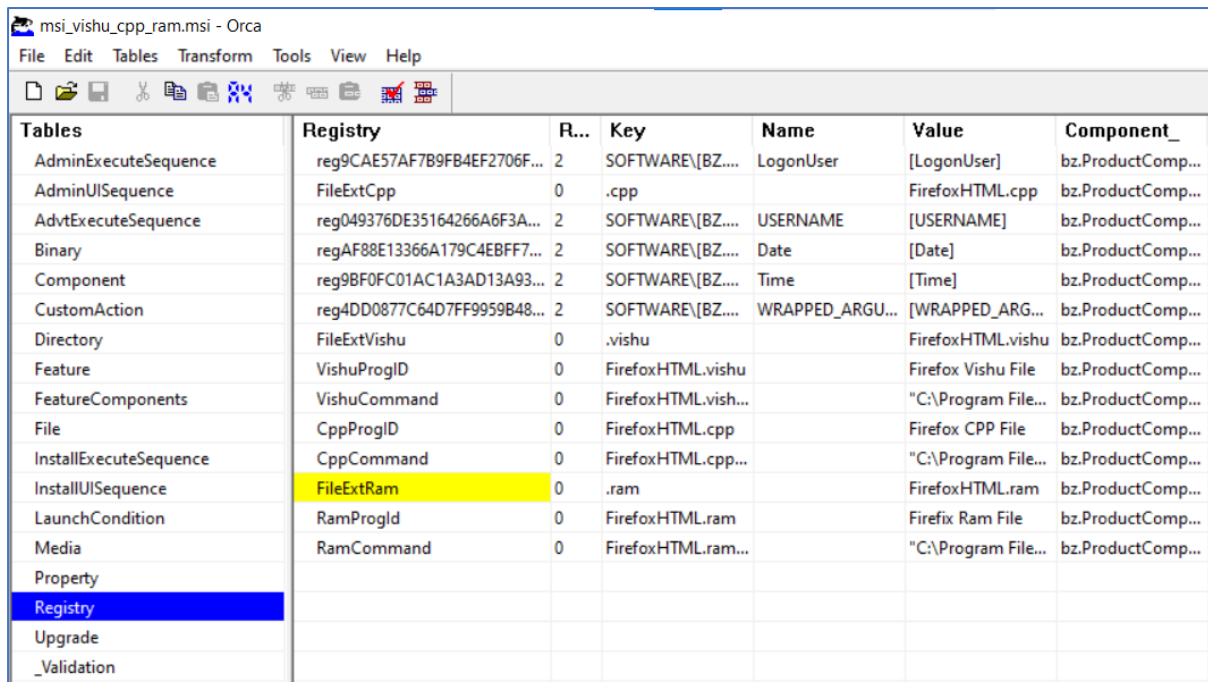
CppProgID	0	FirefoxHTML.cpp	Firefox CPP File	bz.ProductComp...
CppCommand	0	FirefoxHTML.cpp...	"C:\Program File...	bz.ProductComp...

FileExtRam	0	.ram	FirefoxHTML.ram	bz.ProductComp...
RamProgId	0	FirefoxHTML.ram	Firefix Ram File	bz.ProductComp...
RamCommand	0	FirefoxHTML.ram...	"C:\Program File...	bz.ProductComp...

3. Registries for .ram extension

Registry	Root	Key	Value	Component
FileExtRam	0	.ram	FirefoxHTML.ram	bz.ProductComponent
RamProgId	0	FirefoxHTML.ram	Firefox Ram File	bz.ProductComponent
RamCommand	0	FirefoxHTML.ram\shell\open\command	"C:\Program Files (x86)\Mozilla Firefox\firefox.exe" "%1"	bz.ProductComponent

All Registry values are :



Tables	Registry	R...	Key	Name	Value	Component_
AdminExecuteSequence	reg9CAE57AF7B9FB4EF2706F...	2	SOFTWARE\BZ....	LogonUser	[LogonUser]	bz.ProductComp...
AdminUISequence	FileExtCpp	0	.cpp		FirefoxHTML.cpp	bz.ProductComp...
AdvtExecuteSequence	reg049376DE35164266A6F3A...	2	SOFTWARE\BZ....	USERNAME	[USERNAME]	bz.ProductComp...
Binary	regAF88E13366A179C4EBFF7...	2	SOFTWARE\BZ....	Date	[Date]	bz.ProductComp...
Component	reg9BF0FC01AC1A3AD13A93...	2	SOFTWARE\BZ....	Time	[Time]	bz.ProductComp...
CustomAction	reg4DD0877C64D7FF9959B48...	2	SOFTWARE\BZ....	WRAPPED_ARGU...	[WRAPPED_ARGU...	bz.ProductComp...
Directory	FileExtVishu	0	.vishu		FirefoxHTML.vishu	bz.ProductComp...
Feature	VishuProgId	0	FirefoxHTML.vishu		Firefox Vishu File	bz.ProductComp...
FeatureComponents	VishuCommand	0	FirefoxHTML.vishu...		"C:\Program File...	bz.ProductComp...
File	CppProgId	0	FirefoxHTML.cpp		Firefox CPP File	bz.ProductComp...
InstallExecuteSequence	CppCommand	0	FirefoxHTML.cpp...		"C:\Program File...	bz.ProductComp...
InstallUISequence	FileExtRam	0	.ram		FirefoxHTML.ram	bz.ProductComp...
LaunchCondition	RamProgId	0	FirefoxHTML.ram		Firefox Ram File	bz.ProductComp...
Media	RamCommand	0	FirefoxHTML.ram...		"C:\Program File...	bz.ProductComp...
Property						
Registry						
Upgrade						
_Validation						

Registry : it is a unique identifier (primary key) for this registry entry.

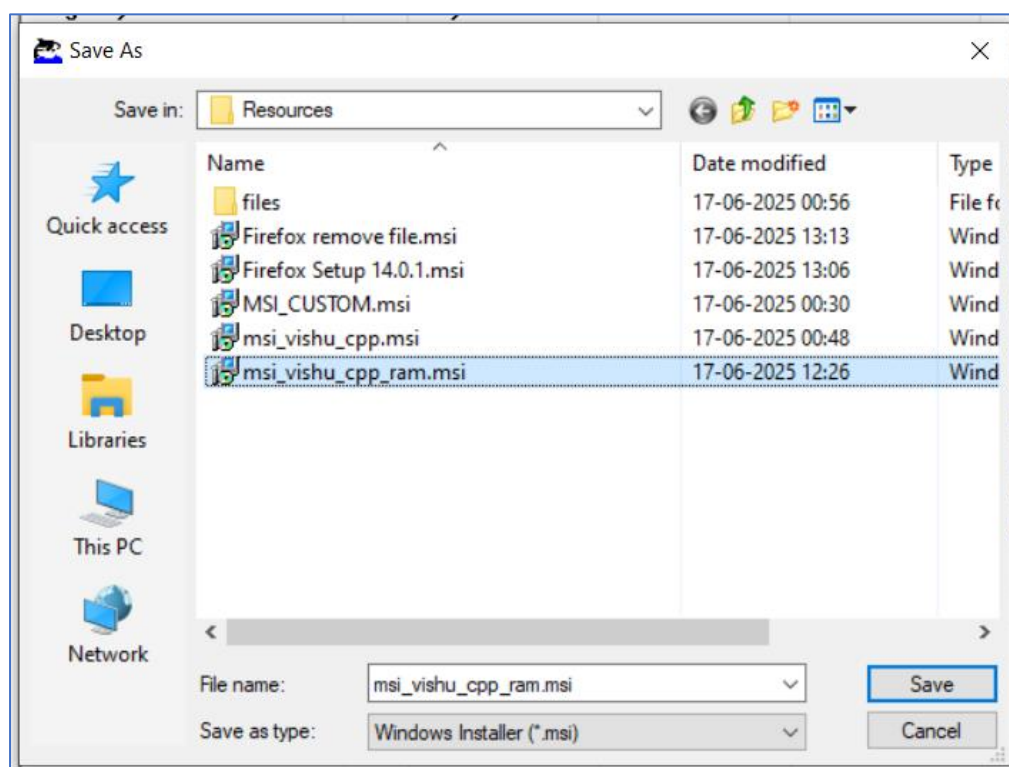
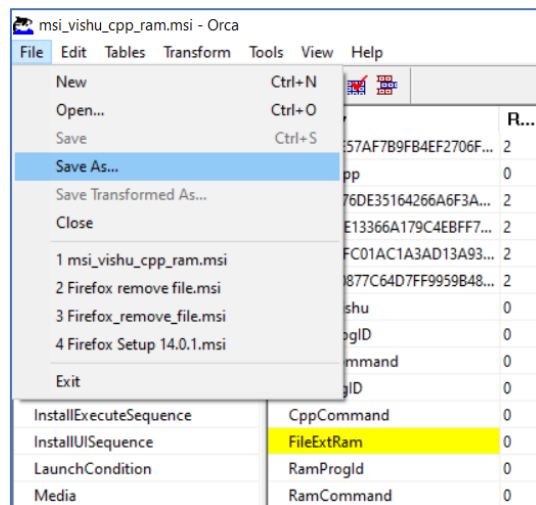
Root: Specifies the root key in the Windows Registry. 0 for default.

Value : The subkey (path) under the root where the value will be written.

Component : References a component that controls the installation/uninstallation of this registry key/value.

08) Got to file menu and save file as save as file and give a custom name to file.

Eg. `msi_vishu_cpp_ram.msi`

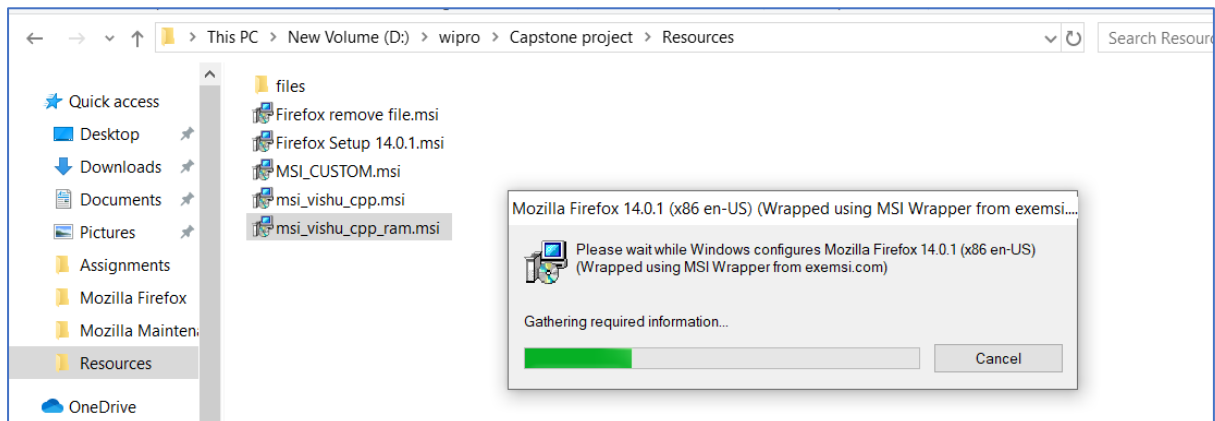


My msi file is stored at location :

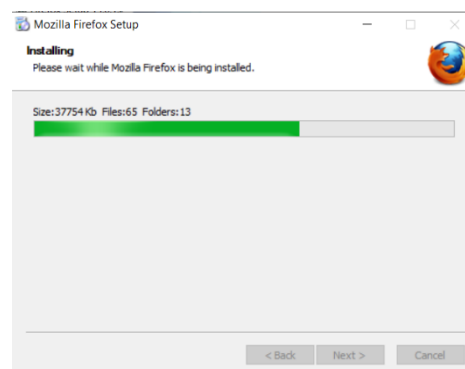
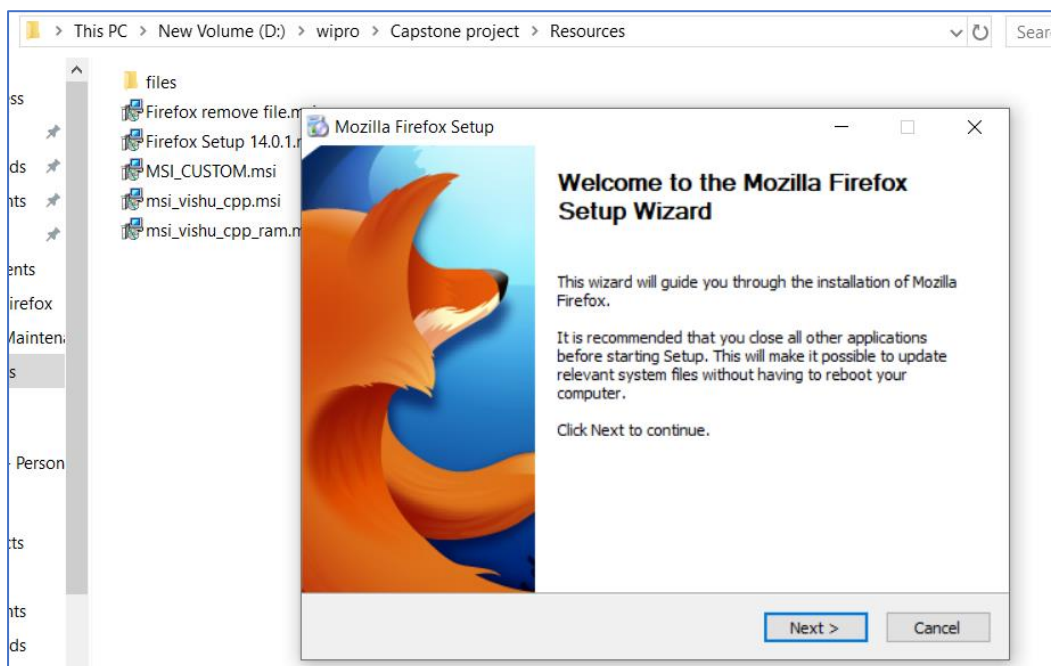
`"D:\wipro\Capstoneproject\Resources\msi_vishu_cpp_ram.msi"`

09) Run the custom msi file :

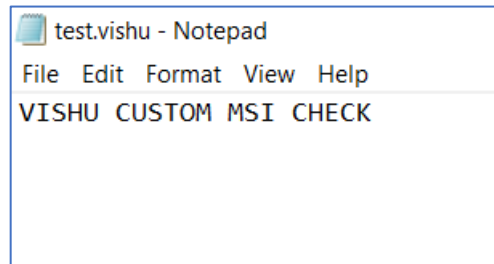
Go to msi file location and run firefox msi setup file.



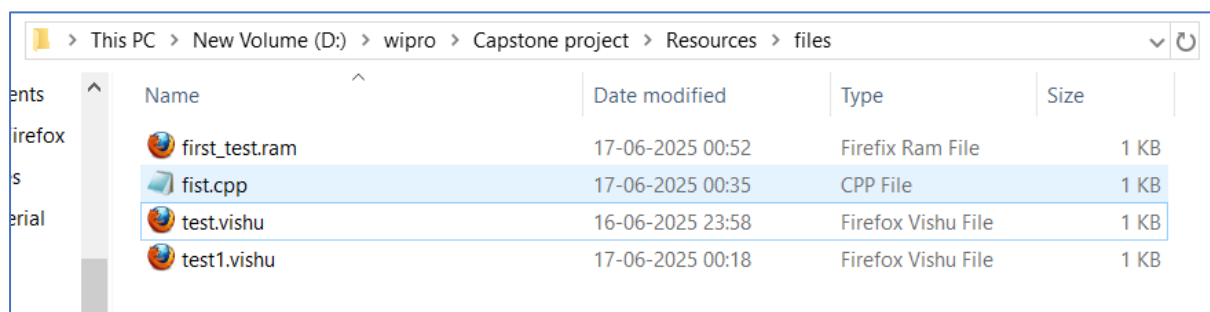
Installation wizard will be shown. complete the installation using follow the wizard.



10) Create a text file: open notepad and create a text file with custom extension and save it. My file is stored at : D:\wipro\Capstone project\Resources\files\test.vishu



11) Goto that custom text file and open it.



The file will be automatically opened in firefox browser in rea-only mode.

