

Add Edit Custom Tables in Orca

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 to edit custom tables in msi file and perform actions automatically like,
Create environment variable
Create/delete/modify Registry.

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

04) Tool used : there are many ways and tools available in the market for Edit Custom table, Like : Advance installer GUI, Orca Tool, instead. but I have used orca for msi file association.

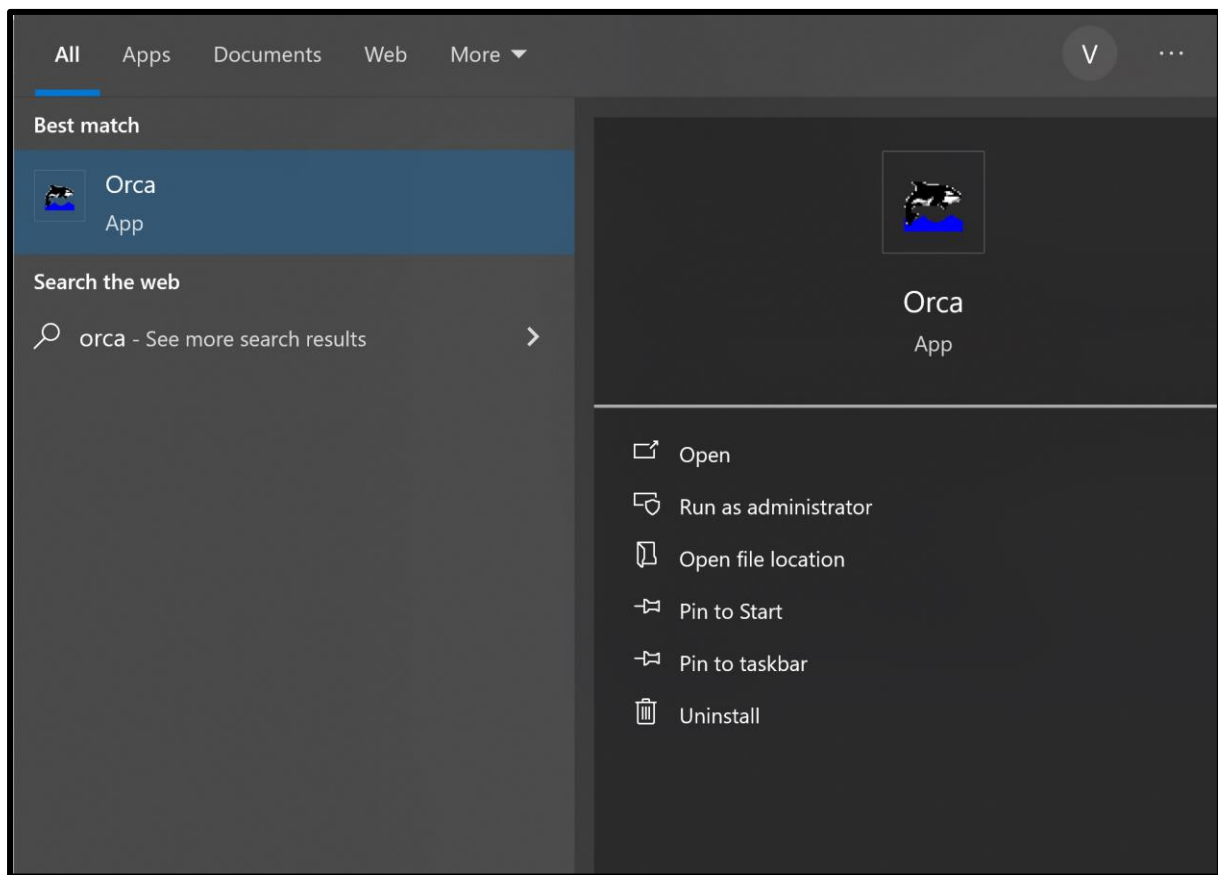
Orca Tool : Orca is a free Windows Installer package editor from Microsoft. It lets you directly view and edit the internal database tables of .msi including setting file associations, modifying components, registry entries, shortcuts, and more.

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

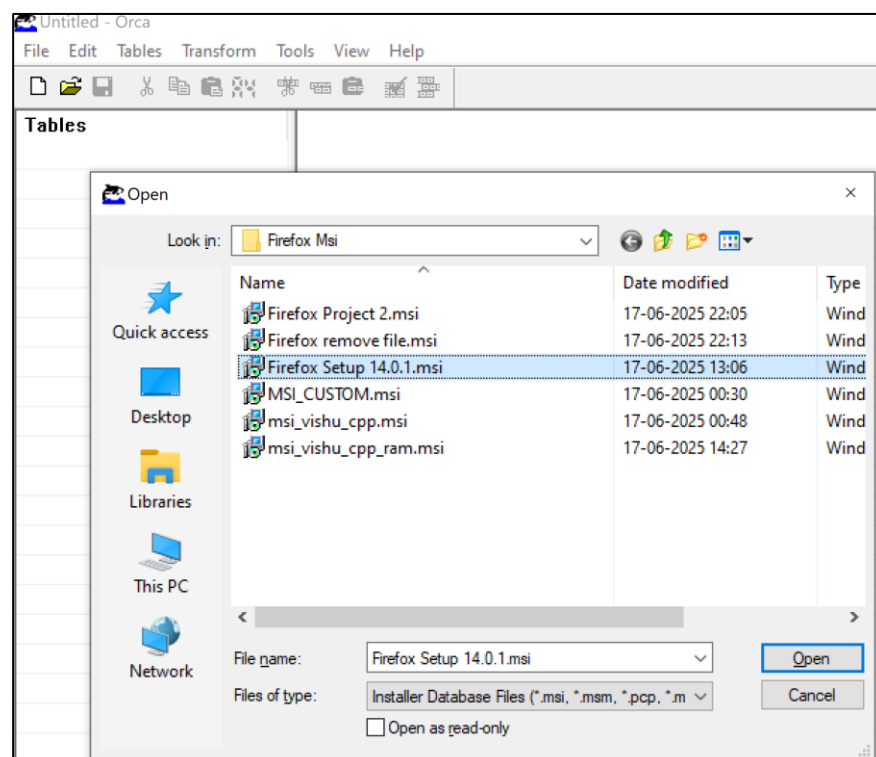
After download you will see a **winsdksetup.exe** file.

wipro_25101554_DWS - Batch 1 - Winte...	16-06-2025 23:31	Microsoft Excel W...	15 KB
winsdksetup.exe	16-06-2025 23:31	Application	1,415 KB

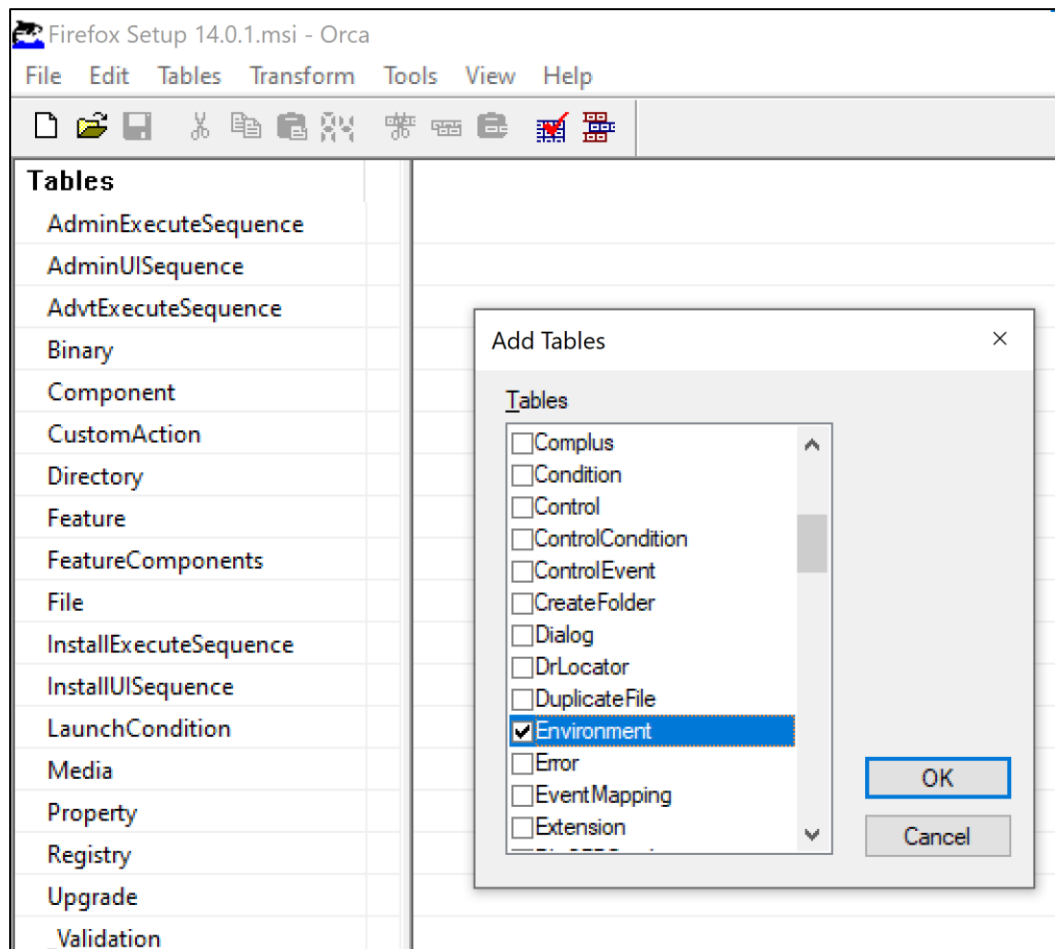
05) open Orca tool : click on start menu and searchfor orca tool and open it.



06) Open firefox msi file :



07) Add Missing tables : click on table meny and then click on **Menu->table->new** to add new table.



The **Environment Table** in an **MSI** package is used to create, modify, or remove environment variables during the installation or uninstallation of an application.

Add the following values to add custom environment variable.

Enviroment	Name	Vakue	Component_
FIREFOX_HOME="C:\Program Files (x86)\Mozilla Firefox"	FIREFOX_HOME	C:\Program Files (x86)\Mozilla Firefox	bz.ProductComponent

This creates a environment variable as: FIREFOX_HOME= C:\Program Files (x86)\Mozilla Firefox

File	Edit	Tables	Transform	Tools	View	Help
Tables	Environment	Name	Value	Component_		
AdminExecuteSequence	FIREFOX_HOME=C:\Program Files (x86)\Mozilla Firefox	FIREFOX_HOME	C:\Program Files (x86)\Mozilla Firefox	bz.ProductComponent		
AdminUISequence						

08) Create custom Registry: to create a custom registry navigate to the **Registry** Table. And click on add row ,then add following values

Registry	Root	Key	Name	Value	Component_
CustomRegistry	2	SOFTWARE\MyKey	VishalKey	Wipro	bz.ProductComponent

Registry	R...	Key	Name	Value	Component_
reg9CAE57AF7B9FB4EF2706F95B4883B419	2	SOFTWARE\BZ.COMPANYNAME\MSI ...	LogonUser	[LogonUser]	bz.ProductComponent
CustomRegistry	2	SOFTWARE\MyKey	VishalKey	Wipro	bz.ProductComponent

This creates a custom registry at : Computer\HKEY_LOCAL_MACHINE\SOFTWARE\MyKey

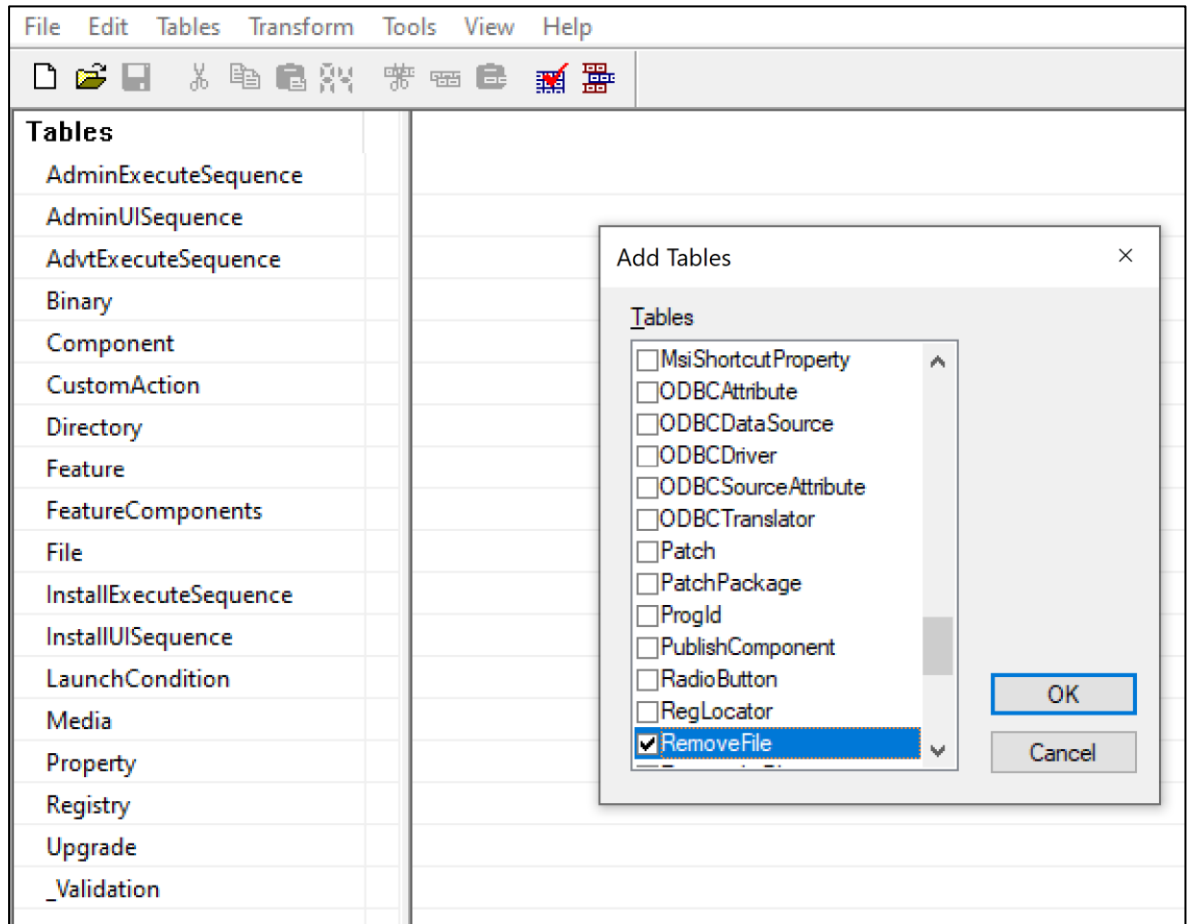
With value wipro.

The screenshot shows a software interface with a table titled 'Registry'. The table has columns: Registry, R..., Key, Name, Value, and Component_. The 'Registry' column contains two entries: 'reg9CAE57AF7B9FB4EF2706F95B4883B419' and 'CustomRegistry'. The 'R...' column contains '2' for both. The 'Key' column contains 'SOFTWARE\BZ.COMPANYNAME\MSI ...' and 'SOFTWARE\MyKey'. The 'Name' column contains 'LogonUser', 'VishalKey', 'USERNAME', 'Date', 'Time', and 'WRAPPED_ARGUMENTS'. The 'Value' column contains '[LogonUser]', 'Wipro', '[USERNAME]', '[Date]', '[Time]', and '[WRAPPED_ARGUMENTS]'. The 'Component_' column contains 'bz.ProductComponent' for all entries. An 'Add Row' dialog box is open, showing fields for Name, Value, Root, Key, and Column. The 'Key' field is populated with 'SOFTWARE\MyKey'. The 'Column' field is populated with 'Root - Short, Required'. The 'OK' button is highlighted.

09) Add Entries to RemoveFile Table:

This table removes files/folders on install or uninstall

Click on table menu->add table then select RemoveFile table to add table.



Add values in RemoveFile table as below :

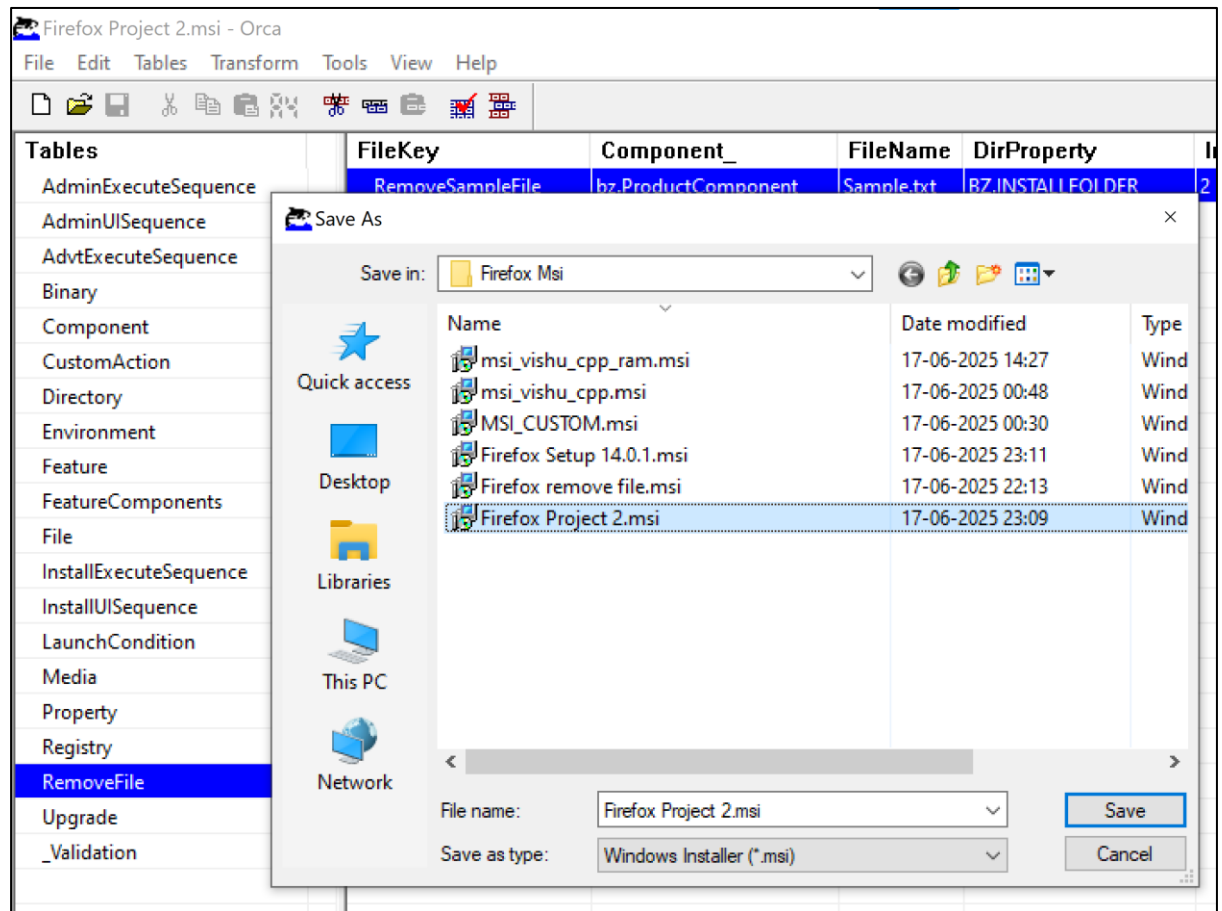
FileKey	Component_	Name	DirProperty	InstallMode
RemoveSampleFile	bz.ProductComponent	Sample.txt	BZ.INSTALLFOLDER	2

Firefox Project 2.msi - Orca					
File Edit Tables Transform Tools View Help					
Tables	FileKey	Component_	FileName	DirProperty	InstallMode
AdminExecuteSequence	RemoveSampleFile	bz.ProductComponent	Sample.txt	BZ.INSTALLFOLDER	2
AdminUISequence					
AdvtExecuteSequence					
Binary					
Component					
CustomAction					

It will remove Saple.txt file from installer directry,when we uninstall application.

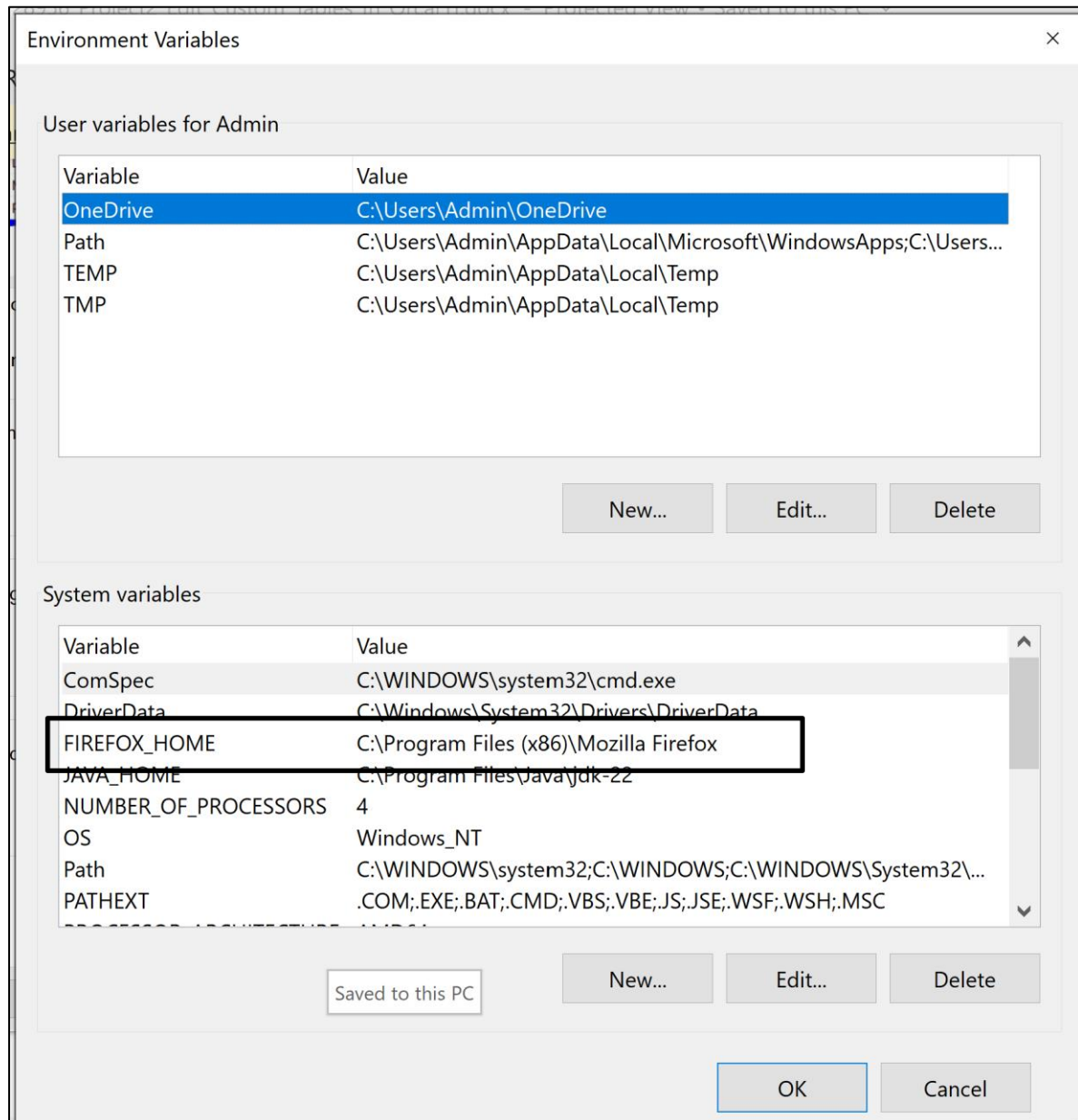
10) Save the msi file and install application:

my msi installer file is saved at location : D:\wipro\Capstone-project\Resources\Firefox Msi\Firefox Project 2.msi. go to that path in run installer file,

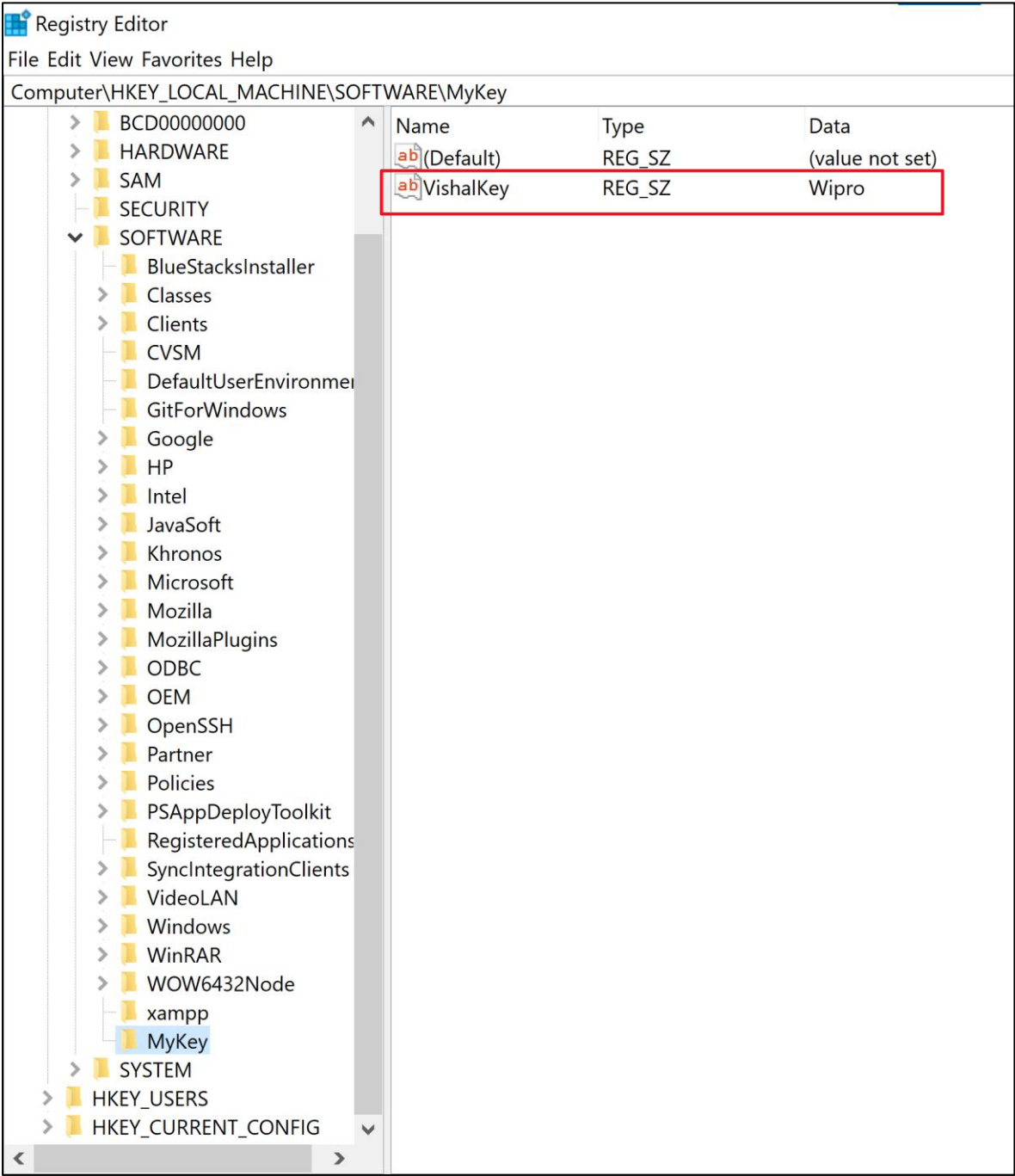


After the file installation check the Enviroment Variable,Registry keys etc

Enviroment Variables :



Registry Editor :



11) Conclusion :

in conclusion.

- ❖ Orca allows powerful **customization** of MSI behavior
- ❖ By manually editing **Environment**, **RemoveFile**, and **Registry** tables, we can Set environment variables, Clean up unnecessary files, Configure registry entries, etc
- ❖ These techniques are **valuable** for software packaging, enterprise deployment, and system integration.