

DEPLOYMENT OF SOFTWARE IN WINDOWS

DEPLOYMENT OF PYTHON SOFTWARE IN WINDOWS

- In order to create a real software, we need an executable file for the application / project / program
- The exe file can be obtained using **auto-py-to-exe** or **pyinstaller** softwares in python

Requirements

- Inno Setup Compiler
- Input executable file (.exe)
- **OS:** Windows Vista or Above Versions

Inno Setup Compiler (Setup Builder Application)

- It is a **free desktop software** installer for windows programs (creating installer packages on windows to make an exe file for setup software in windows OS)
- It is developed by Jordan Russell and Martijn Laan
- It is **free and open source product**
- It supports installation, uninstallation and upgrades of software.

Technical Details

S.N	Information	Description
1.	Type of the product	Free and Open Source
2.	Developer	Jordan Russell's Software
3.	First Release	1997
4.	Developed By	Delphi and Pascal Languages
5.	Supported OS	Windows
6.	Type	Setup Creator
7.	License	Free - Modified BSD License
8.	Latest Release	6.2.1 April 2022

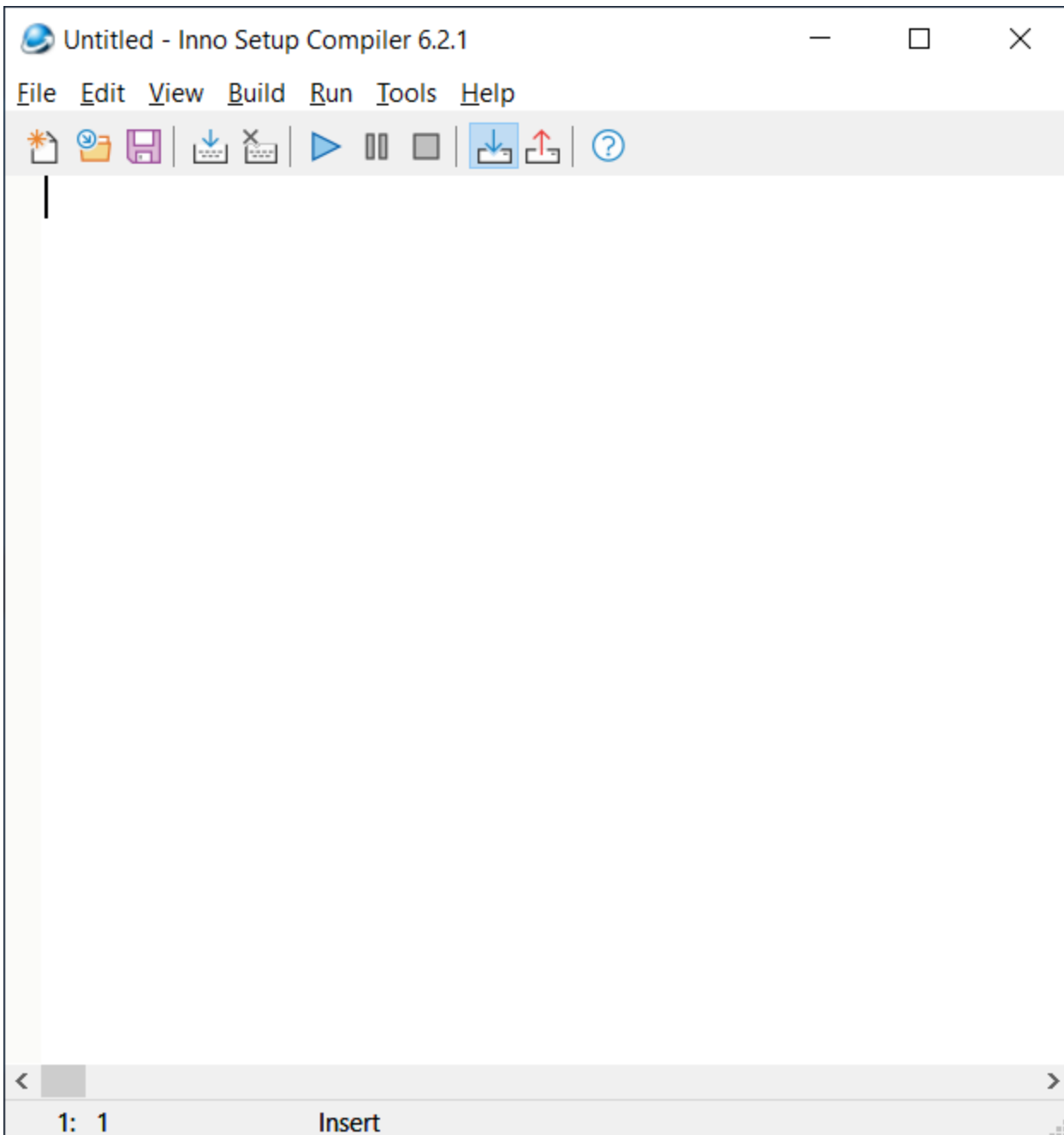
Features of Inno Setup Compiler

- It supports all the version of windows except windows 2000, XP and Server 2003
- It supports disk spanning which is a feature of CD and DVD burning software
- Customizable setup types. Ex.
- It supports the creation of shortcuts, including in the Start Menu and on the desktop
- It supports for multiple platforms (IA-32, x64 and IA-64) in a single binary. ARM64 is also supported.
- It supports for multilingual installs.
- It supports for passworded and encrypted installs.
- It supports the creation of registry and .INI entries.
- Integrated Pascal scripting engine.
- Full source code for inno setup is available from GitHub.

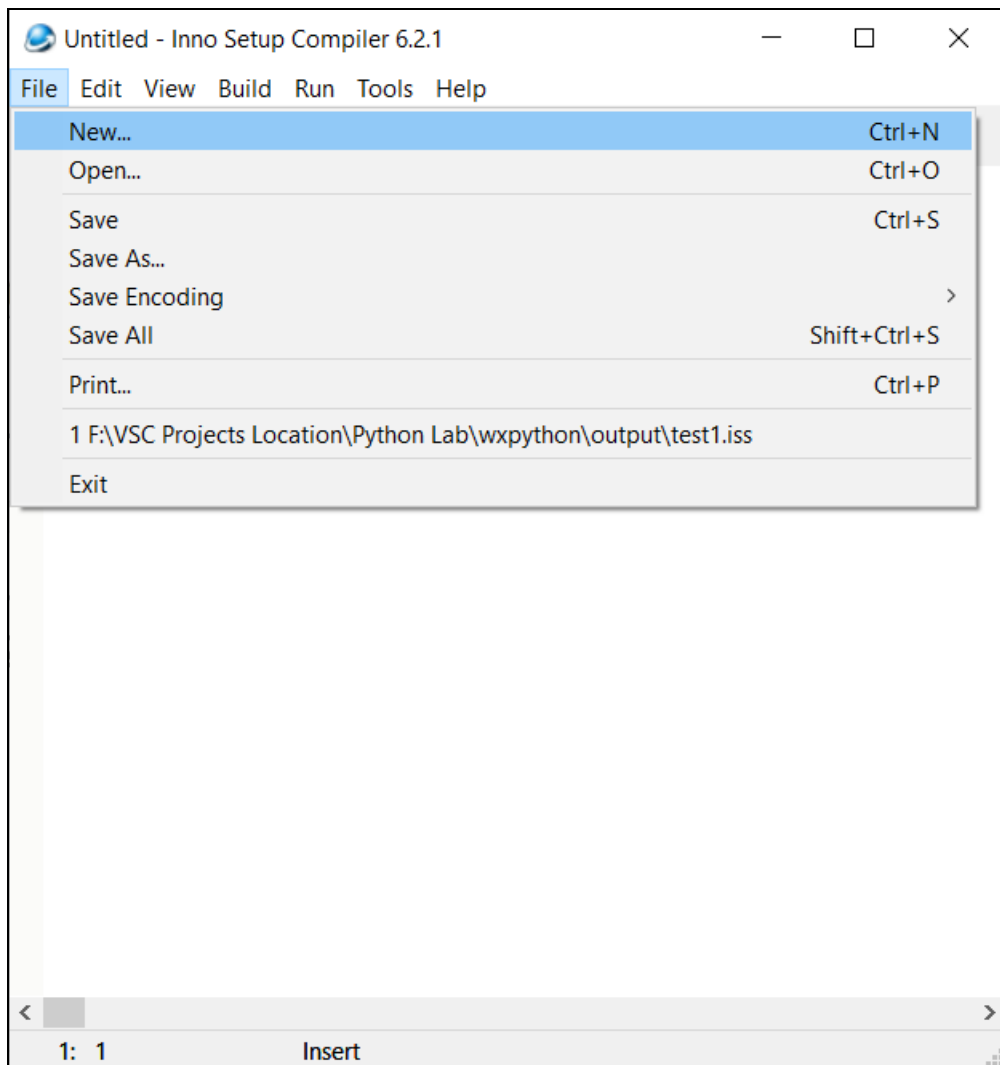
I. CREATING AND DEPLOYING SOFTWARE IN WINDOWS USING INNO SETUP COMPILER

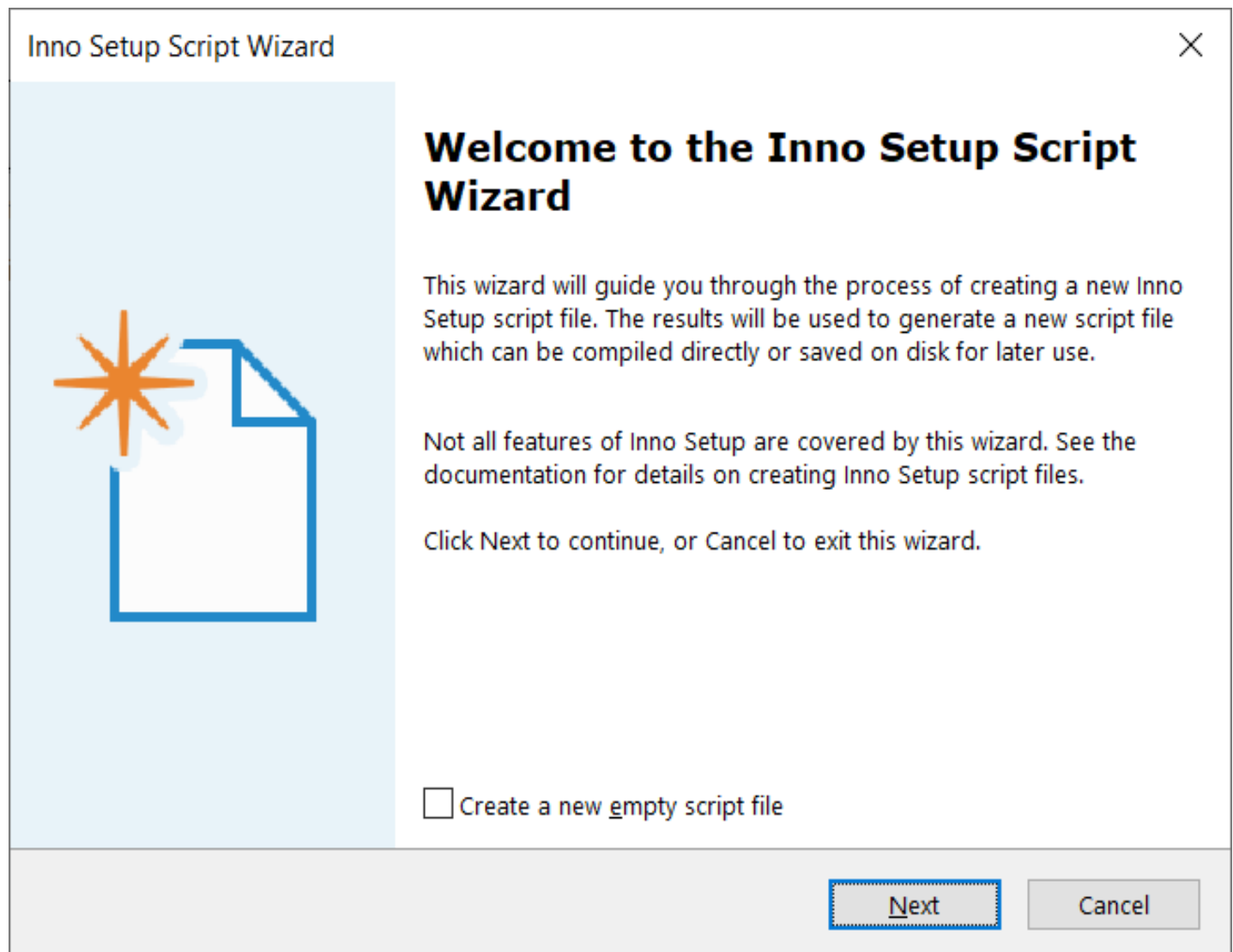
Setup Builder	:	Inno Setup Compiler 6.2.1
Application	:	Windows Application (WxPython GUI)
Input File	:	.exe file
OS	:	Windows 10

Step 1: Launching Inno Setup Compiler

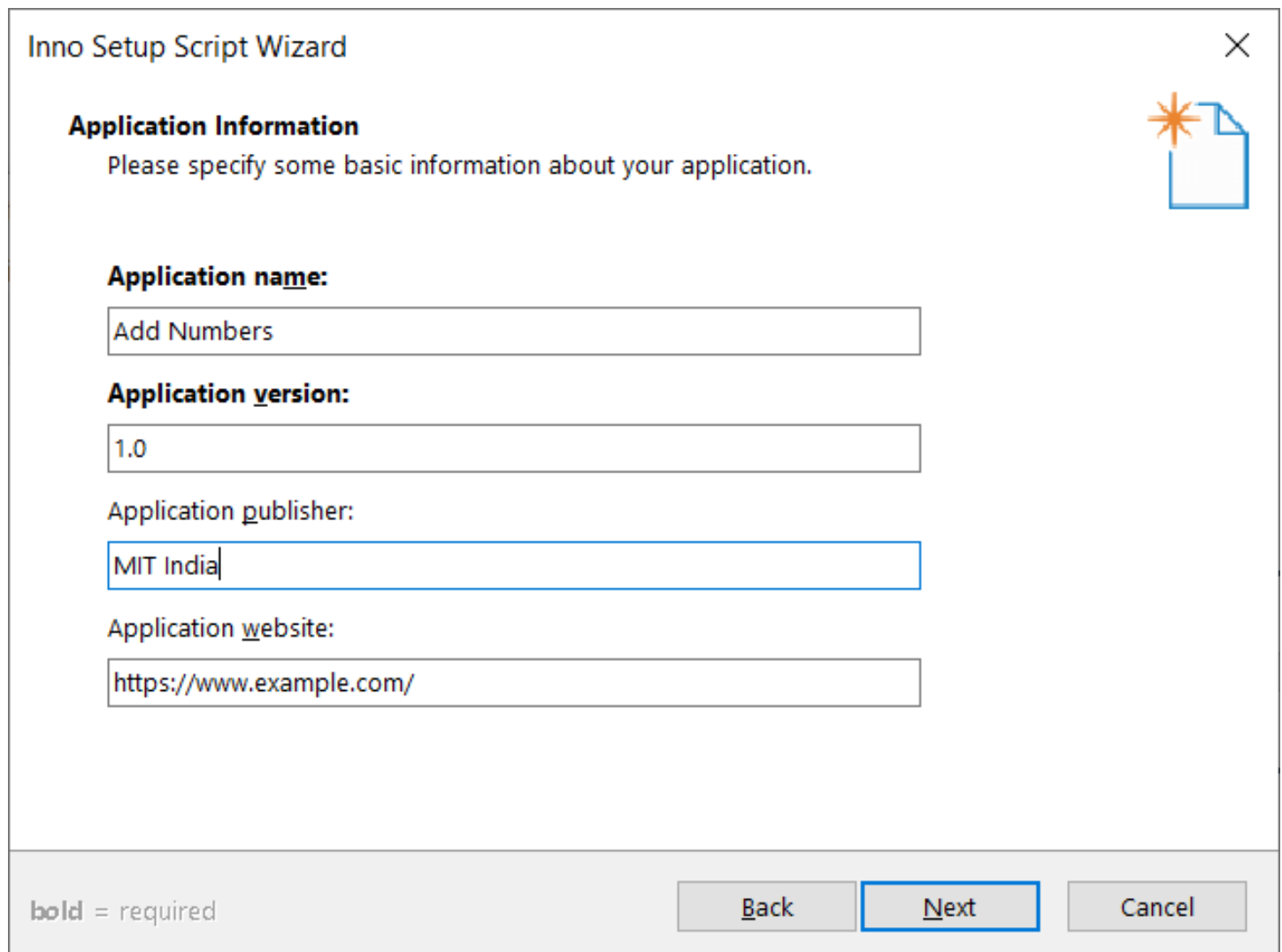


Step 2: Click **New** Menu Item



Step 3: Click [Next](#) to create a new script file using the script wizard

Step 4: Provide Details for **Application Information**



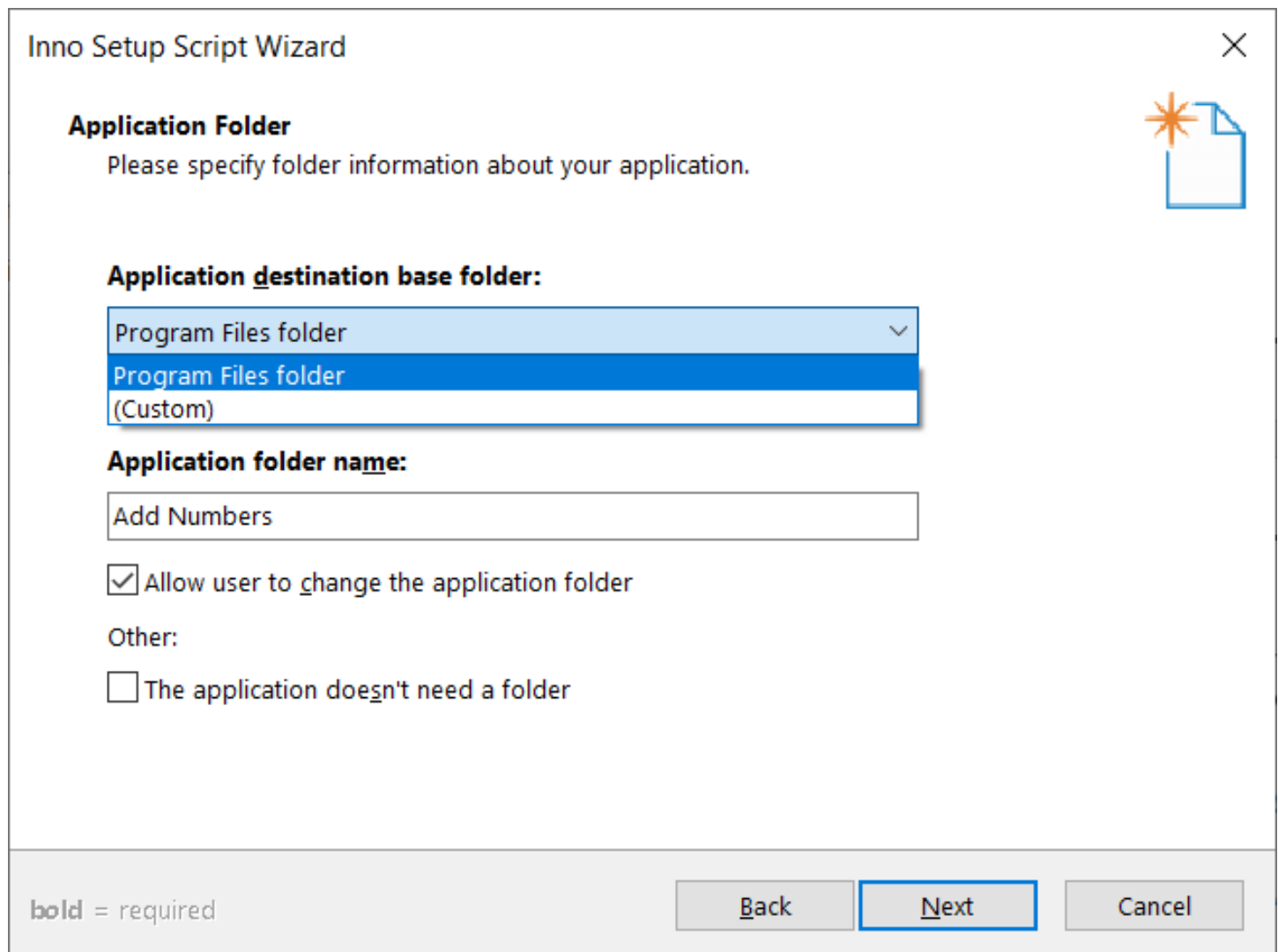
The screenshot shows the 'Inno Setup Script Wizard' window, specifically the 'Application Information' step. The window has a title bar with a close button (X) and a help icon (orange star). The main area contains the following fields:

- Application name:** A text box containing 'Add Numbers'.
- Application version:** A text box containing '1.0'.
- Application publisher:** A text box containing 'MIT India'.
- Application website:** A text box containing 'https://www.example.com/'.

At the bottom, there is a legend indicating that bold text means 'required'. To the right of the legend are three buttons: 'Back', 'Next' (which is highlighted with a blue border), and 'Cancel'.

- Here, we need to provide the details like below
 - Application Name (Setup File Name)
 - Version of the Software
 - This will be needed when you want to provide further update of the application
 - Publisher Name
 - Application Website.

Step 5: Provide Details for **Application Destination Folder**



The screenshot shows the 'Inno Setup Script Wizard' window at the 'Application Folder' step. The title bar reads 'Inno Setup Script Wizard' with a close button (X) in the top right corner. Below the title bar, the section is titled 'Application Folder' with a sub-instruction: 'Please specify folder information about your application.' To the right of this text is an icon of a document with a star. The main area contains two sections: 'Application destination base folder:' with a dropdown menu showing 'Program Files folder' (selected), 'Program Files folder', and '(Custom)'; and 'Application folder name:' with a text box containing 'Add Numbers'. Below these are two checkboxes: the first is checked and labeled 'Allow user to change the application folder', and the second is unchecked and labeled 'The application doesn't need a folder'. At the bottom left, a legend states 'bold = required'. At the bottom right are three buttons: 'Back', 'Next' (highlighted with a blue border), and 'Cancel'.

Inno Setup Script Wizard

Application Folder
Please specify folder information about your application.

Application destination base folder:

Program Files folder
Program Files folder
(Custom)

Application folder name:

Add Numbers

☒ Allow user to change the application folder

Other:

☐ The application doesn't need a folder

bold = required

Back Next Cancel

- Here, we need to specify the application destination folder for storing the setup file and its related files.
- Usually it is program files of windows which can be either **C:\Program Files** or **C:\Program Files (x86)**.

Step 6: Selection of **Input Executable (.exe) File for Making Software**

Inno Setup Script Wizard

Application Files
Please specify the files that are part of your application.

Application main executable file:

F:\VSC Projects Location\Python Lab\wxpython\output\add.exe

☐ Allow user to start the application after Setup has finished

☐ The application doesn't have a main executable file

Other application files:

Browse...

Add file(s)...

Add folder...

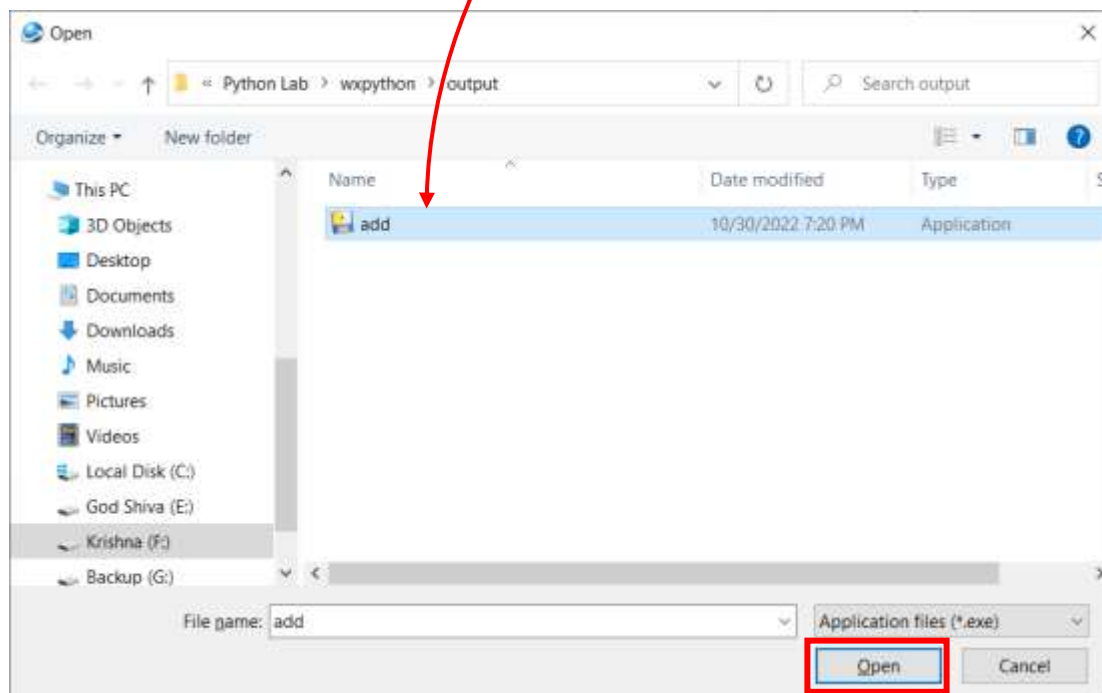
Edit...

Remove

Back **Next** **Cancel**

bold = required


Submission of **Executable File (add.exe)** in Windows



Step 7: Details for **Application File Association and Click Next**

Inno Setup Script Wizard

✕



Application File Association
Please specify which file association should be created for your application.

☒ Associate a file type to the main executable

Application file type name:

Application file type extension:

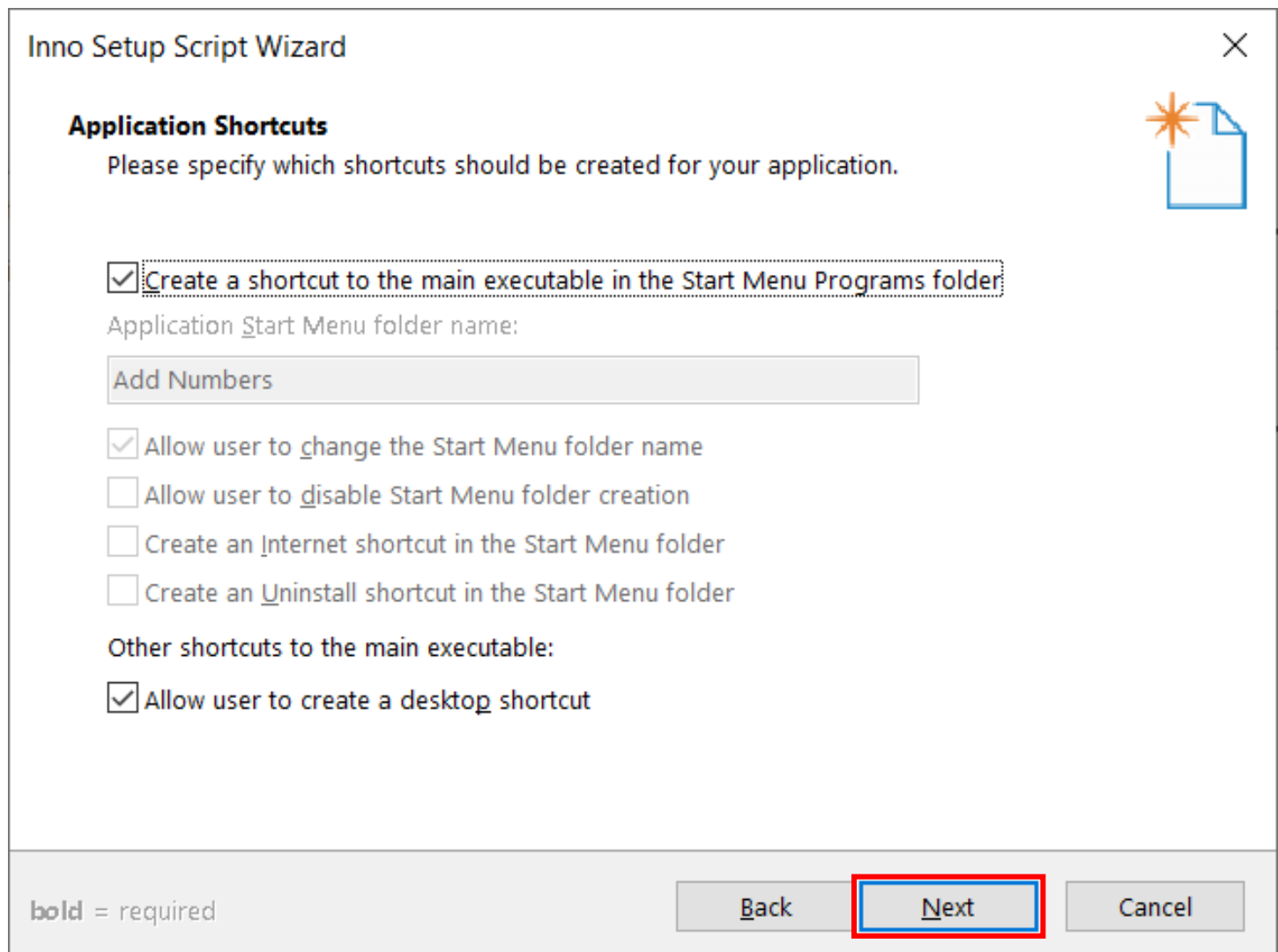
bold = required

Back

Next

Cancel

Step 8: Details for **Application Shortcuts**



The screenshot shows the 'Inno Setup Script Wizard' window, specifically the 'Application Shortcuts' step. The window has a title bar with a close button (X) and a help icon (orange star over a document). The main text says 'Please specify which shortcuts should be created for your application.' Below this, there are several options with checkboxes. The first option, 'Create a shortcut to the main executable in the Start Menu Programs folder', is checked and highlighted with a dotted border. Below it is a text field for 'Application Start Menu folder name:' containing the text 'Add Numbers'. There are four more options with checkboxes: 'Allow user to change the Start Menu folder name' (checked), 'Allow user to disable Start Menu folder creation' (unchecked), 'Create an Internet shortcut in the Start Menu folder' (unchecked), and 'Create an Uninstall shortcut in the Start Menu folder' (unchecked). Below these is the section 'Other shortcuts to the main executable:' with one checked option: 'Allow user to create a desktop shortcut'. At the bottom, there is a legend 'bold = required' and three buttons: 'Back', 'Next' (highlighted with a red rectangle), and 'Cancel'.

Inno Setup Script Wizard

Application Shortcuts

Please specify which shortcuts should be created for your application.

☒ **Create a shortcut to the main executable in the Start Menu Programs folder**

Application Start Menu folder name:

Add Numbers

☒ Allow user to change the Start Menu folder name

☐ Allow user to disable Start Menu folder creation

☐ Create an Internet shortcut in the Start Menu folder

☐ Create an Uninstall shortcut in the Start Menu folder

Other shortcuts to the main executable:

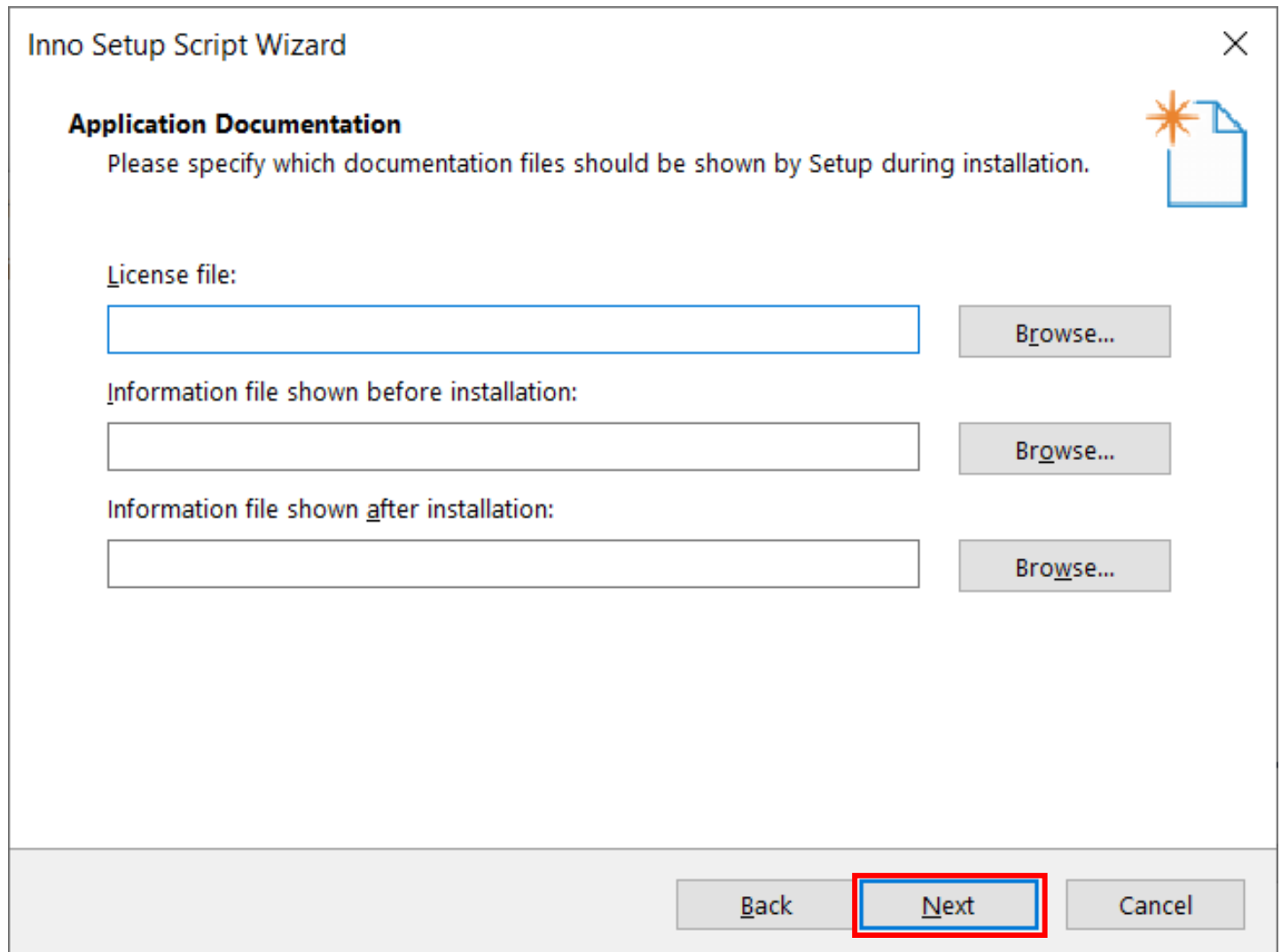
☒ Allow user to create a desktop shortcut

bold = required

Back Next Cancel

- Here, you can **check or uncheck the shortcuts** for desktop and start menu programs for the main executable (.exe) file.

Step 9: Provide Details for Application Documentation



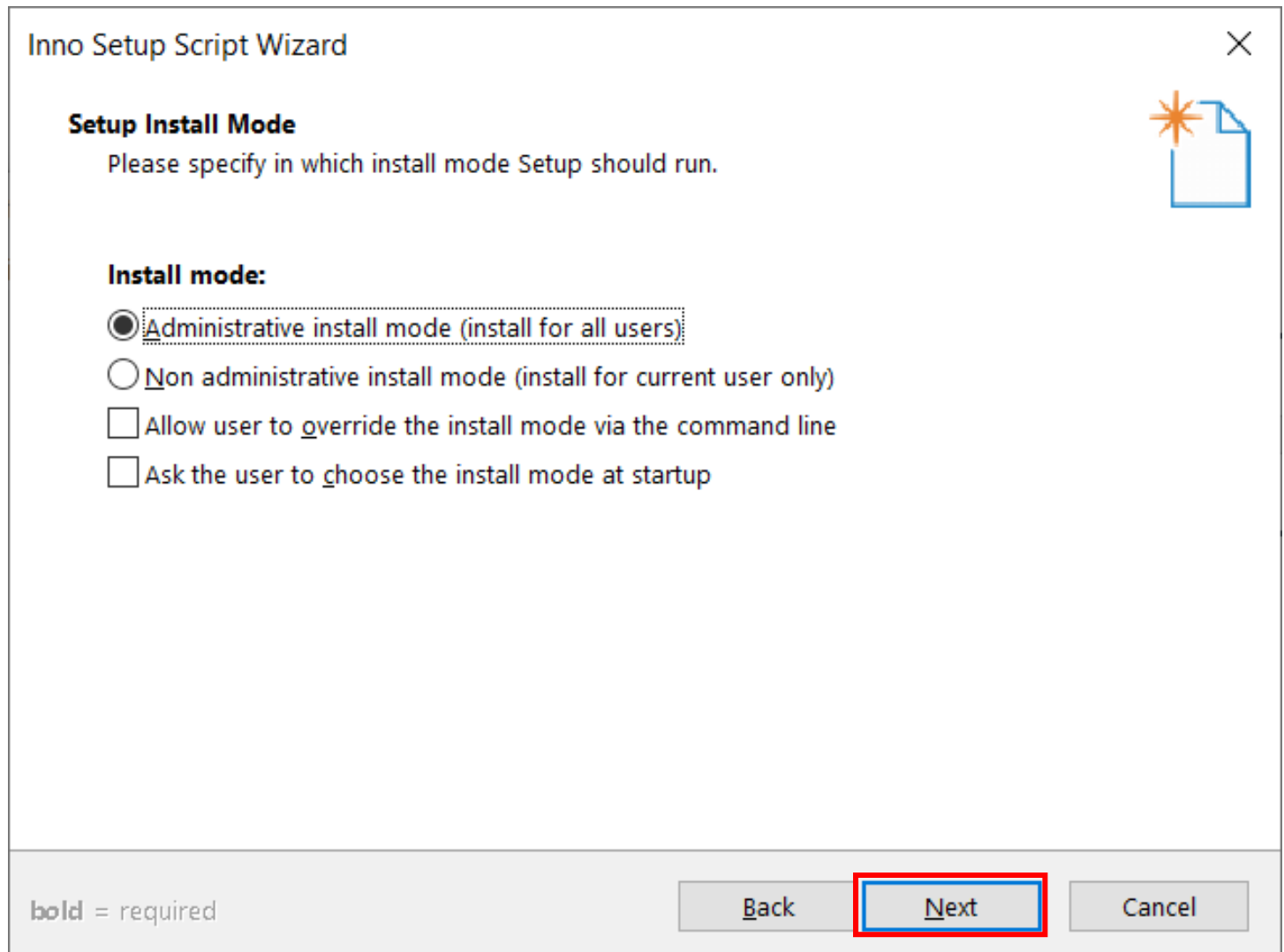
The screenshot shows the 'Inno Setup Script Wizard' window at the 'Application Documentation' step. The window has a title bar with a close button (X) in the top right corner. Below the title bar, the text 'Application Documentation' is followed by an instruction: 'Please specify which documentation files should be shown by Setup during installation.' To the right of this text is an icon of a document with a starburst. Below the instruction, there are three rows of input fields and buttons:

- License file:** A text input field followed by a 'Browse...' button.
- Information file shown before installation:** A text input field followed by a 'Browse...' button.
- Information file shown after installation:** A text input field followed by a 'Browse...' button.

At the bottom of the window, there is a gray bar containing three buttons: 'Back', 'Next', and 'Cancel'. The 'Next' button is highlighted with a red rectangular border.

- This is an optional
- If you want to add any license, you add it using Browse button.

Step 10: Select Option for Setup Install Mode



The screenshot shows the 'Inno Setup Script Wizard' window, specifically the 'Setup Install Mode' step. The window has a title bar with a close button (X) and a help icon (a blue square with an orange star). The main text says 'Please specify in which install mode Setup should run.' Below this, under the heading 'Install mode:', there are four options: 'Administrative install mode (install for all users)' (selected with a radio button), 'Non administrative install mode (install for current user only)' (unselected radio button), 'Allow user to override the install mode via the command line' (unselected checkbox), and 'Ask the user to choose the install mode at startup' (unselected checkbox). At the bottom, there is a legend stating 'bold = required'. To the right of the legend are three buttons: 'Back', 'Next' (highlighted with a red rectangle), and 'Cancel'.

Inno Setup Script Wizard

Setup Install Mode

Please specify in which install mode Setup should run.

Install mode:

- ☒ **Administrative install mode (install for all users)**
- ☐ Non administrative install mode (install for current user only)
- ☐ Allow user to override the install mode via the command line
- ☐ Ask the user to choose the install mode at startup

bold = required

Back Next Cancel

- Here, we have to specify an option for setup install mode should run.
- By default, is Administrative install mode.

Step 11: Choose Language for Setup File

Inno Setup Script Wizard

Setup Languages
Please specify which Setup languages should be included.

Languages:

<input checked="" type="checkbox"/>	English
<input type="checkbox"/>	Armenian
<input type="checkbox"/>	Brazilian Portuguese
<input type="checkbox"/>	Bulgarian
<input type="checkbox"/>	Catalan
<input type="checkbox"/>	Corsican
<input type="checkbox"/>	Czech
<input type="checkbox"/>	Danish
<input type="checkbox"/>	Dutch
<input type="checkbox"/>	Finnish
<input type="checkbox"/>	French
<input type="checkbox"/>	German

Select all
Deselect all

bold = required

Back Next Cancel

Step 12: Provide Details of Compiler Settings like **Output Folder**, **Icon for Setup File**, **Setup File Name**, **Optional Password**

Inno Setup Script Wizard

Compiler Settings
Please specify some basic compiler settings.

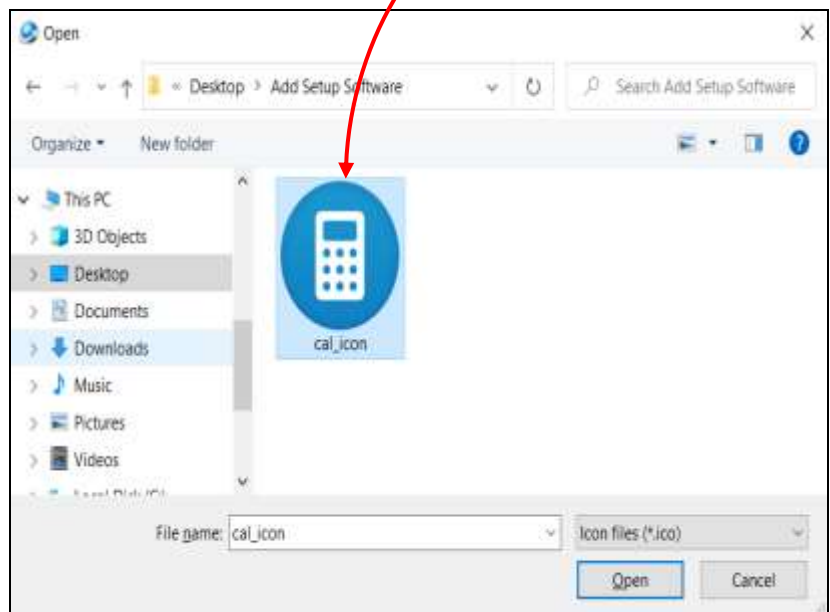
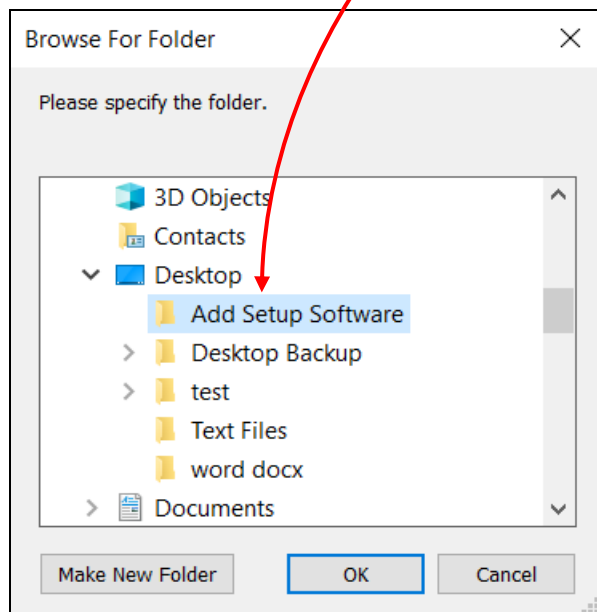
Custom compiler output folder:

Compiler output base file name:

Custom Setup icon file:


Setup password:


Adding Target Output Folder and Icon



Step 13: Select Optional Inno Setup Preprocessor

Inno Setup Script Wizard





Inno Setup Preprocessor
Please specify whether Inno Setup Preprocessor should be used.

The Inno Setup Script Wizard can use #define compiler directives to simplify your script. Although this is not necessary, it will make it easier to manually change the script later.

Do you want the Inno Setup Script Wizard to use #define compiler directives?

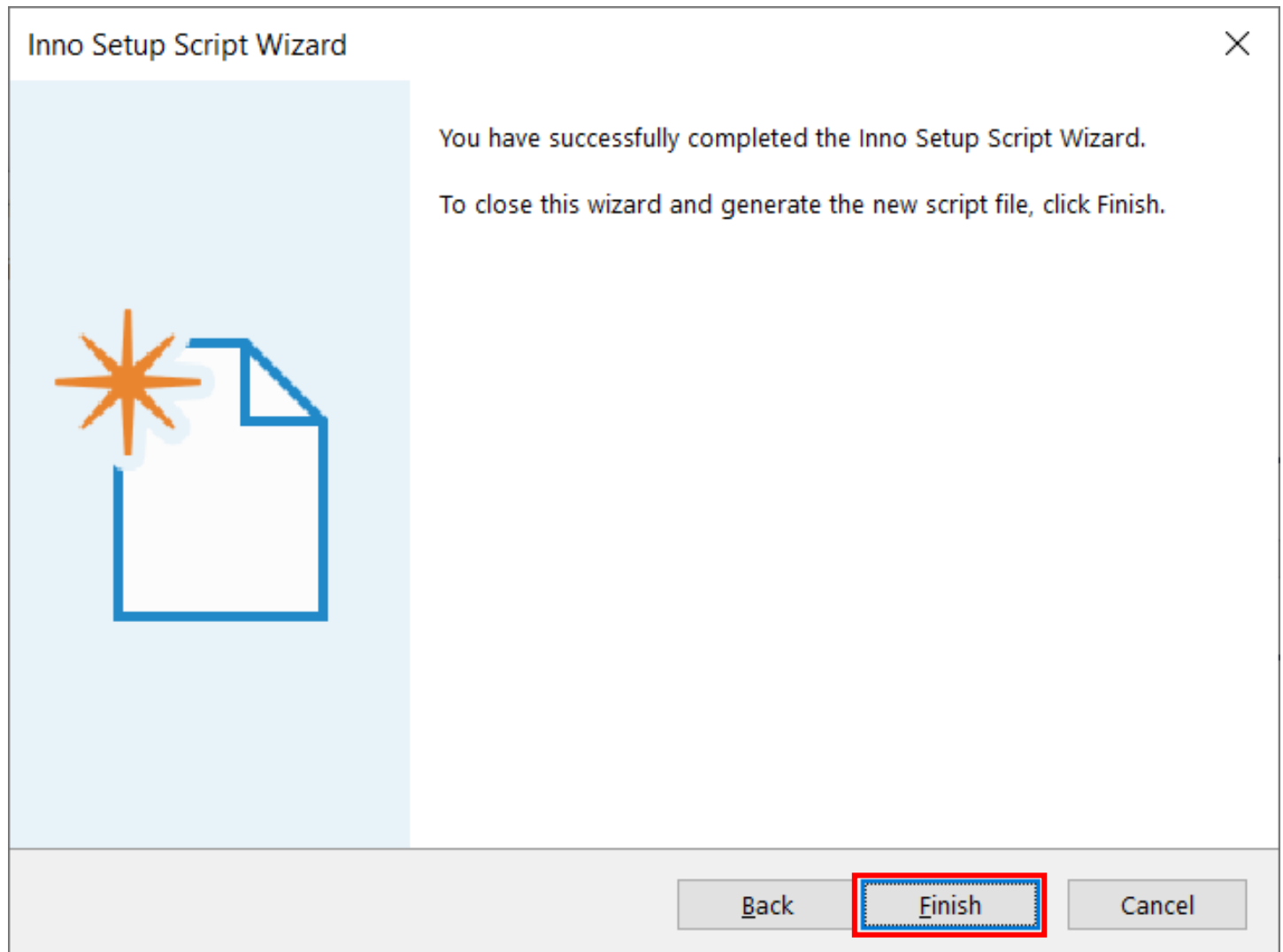
☒ Yes, use #define compiler directives

Back

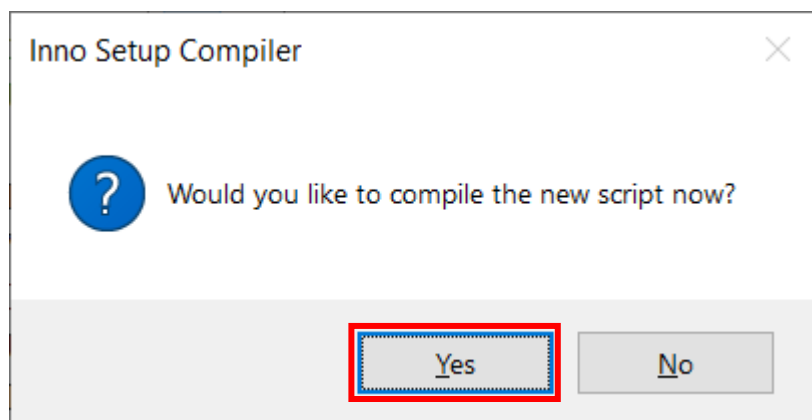
Next

Cancel

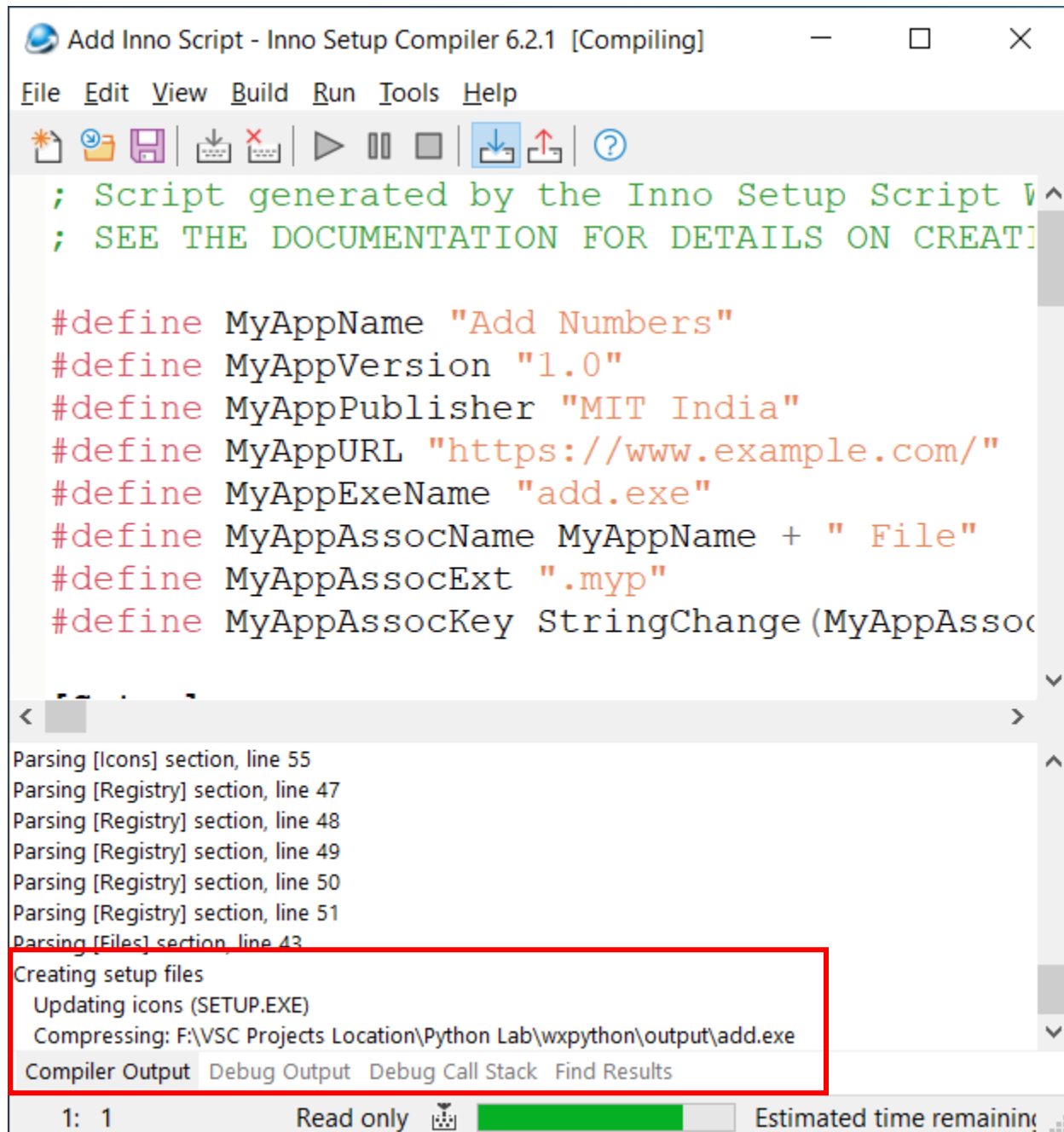
Step 14: Completed Details



Step 15: Click **Yes** to run the new script file



Progress for running setup script file



The screenshot displays the Inno Setup Compiler 6.2.1 window. The title bar reads 'Add Inno Script - Inno Setup Compiler 6.2.1 [Compiling]'. The menu bar includes File, Edit, View, Build, Run, Tools, and Help. The toolbar contains icons for opening, saving, undo, redo, and running the script. The main text area shows the script code, which includes several preprocessor directives for defining application properties like name, version, publisher, URL, and file name. The status bar at the bottom indicates the current progress: '1: 1' and 'Read only'. A red rectangle highlights the 'Creating setup files' section of the status bar, which lists the tasks being performed: 'Updating icons (SETUP.EXE)' and 'Compressing: F:\VSC Projects Location\Python Lab\wxpython\output\add.exe'. The 'Estimated time remaining' is also shown.

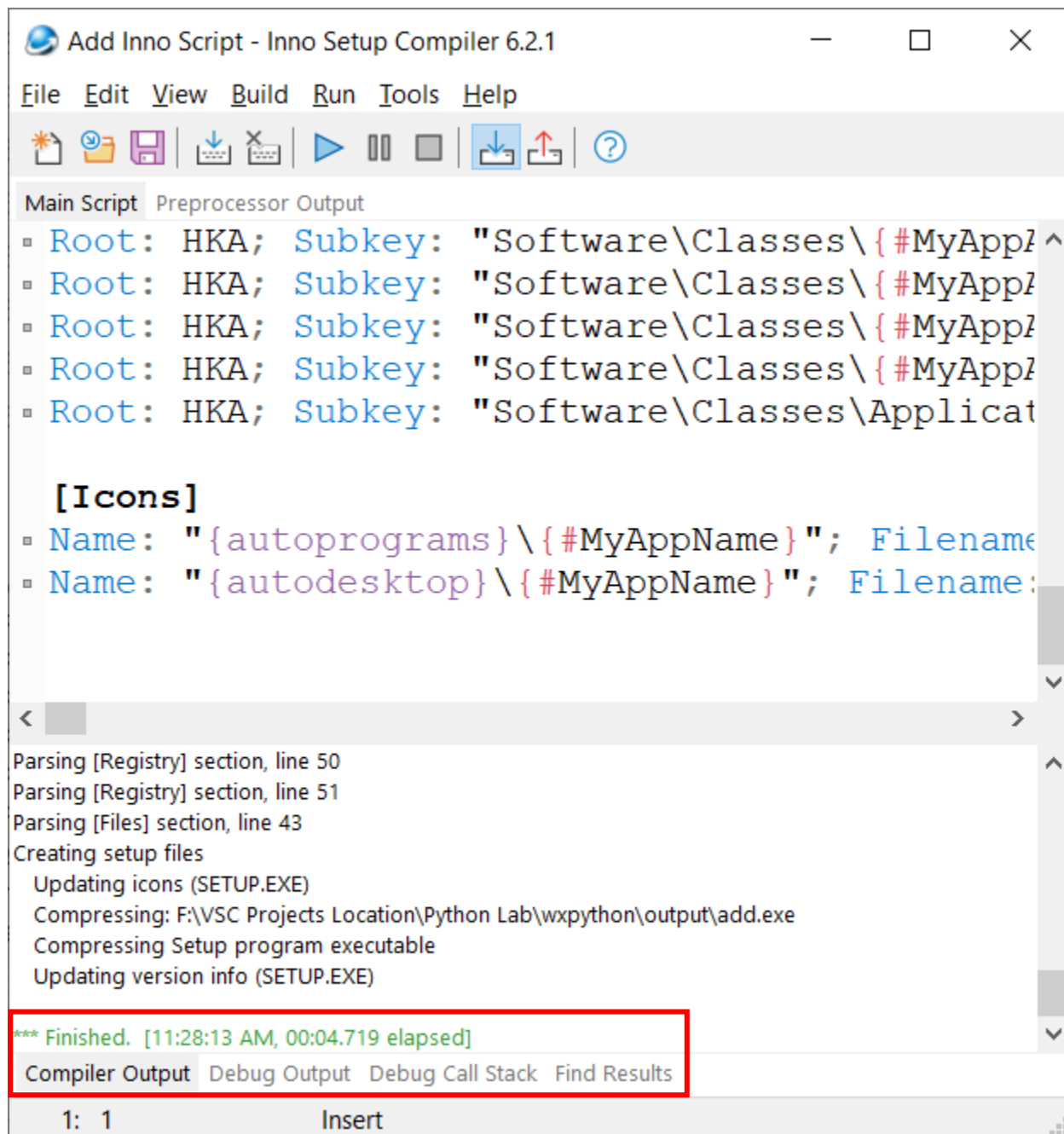
```
; Script generated by the Inno Setup Script Wizard
; SEE THE DOCUMENTATION FOR DETAILS ON CREATING INNO SETUP SCRIPT FILES

#define MyAppName "Add Numbers"
#define MyAppVersion "1.0"
#define MyAppPublisher "MIT India"
#define MyAppURL "https://www.example.com/"
#define MyAppExeName "add.exe"
#define MyAppAssocName MyAppName + " File"
#define MyAppAssocExt ".myp"
#define MyAppAssocKey StringChange (MyAppAssocName, MyAppAssocExt)
```

Parsing [Icons] section, line 55
Parsing [Registry] section, line 47
Parsing [Registry] section, line 48
Parsing [Registry] section, line 49
Parsing [Registry] section, line 50
Parsing [Registry] section, line 51
Parsing [Files] section, line 43
Creating setup files
Updating icons (SETUP.EXE)
Compressing: F:\VSC Projects Location\Python Lab\wxpython\output\add.exe
Compiler Output Debug Output Debug Call Stack Find Results

1: 1 Read only Estimated time remaining

FINISHED STATUS



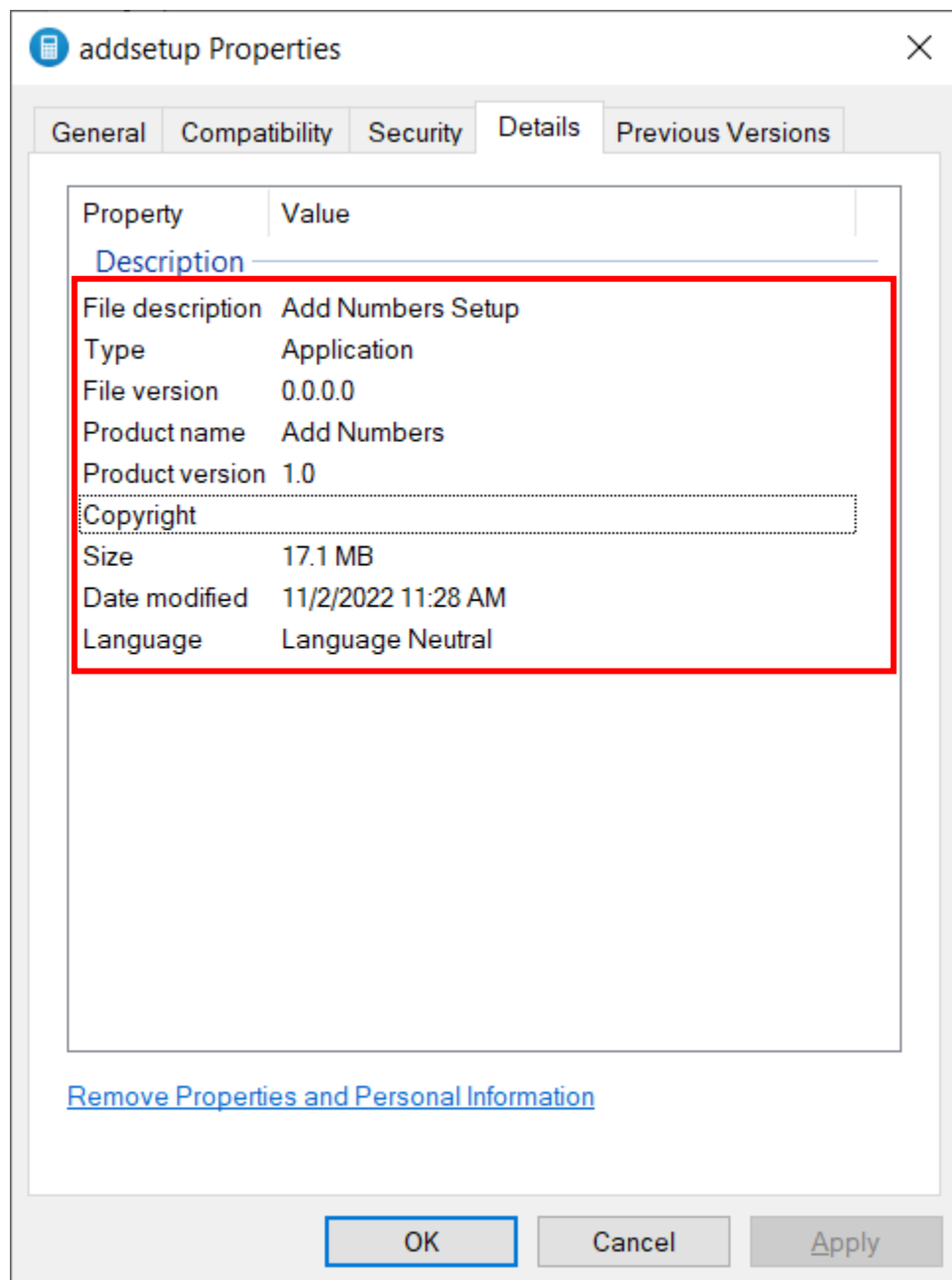
VERIFICATION OF NEWLY CREATED SETUP SOFTWARE IN TARGET FOLDER

The screenshot shows a Windows File Explorer window titled 'Add Setup Software'. The left sidebar shows the navigation pane with 'Add Setup Software' selected. The main pane displays a list of files and folders. The file 'addsetup' is highlighted with a red box. The file details are as follows:

Name	Date modified	Type	Size
Add Inno Script	11/2/2022 11:28 AM	Inno Setup Script	3 KB
addsetup	11/2/2022 11:28 AM	Application	17,550 KB
cal_icon	11/2/2022 11:00 AM	Icon	179 KB

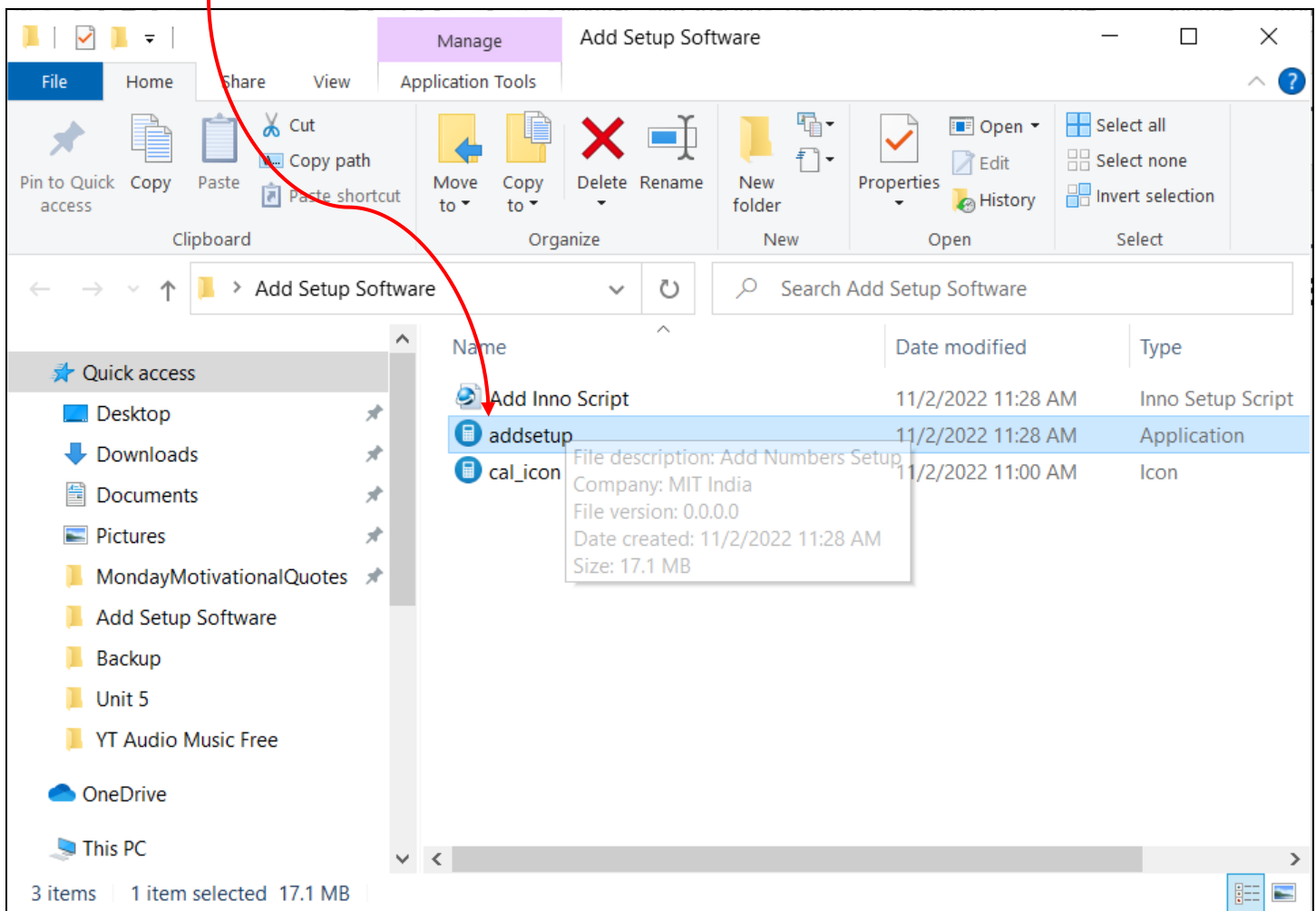
The status bar at the bottom indicates '3 items | 1 item selected 17.1 MB'.

VERIFICATION OF **NEWLY CREATED SETUP SOFTWARE** IN TARGET FOLDER – (Continue)

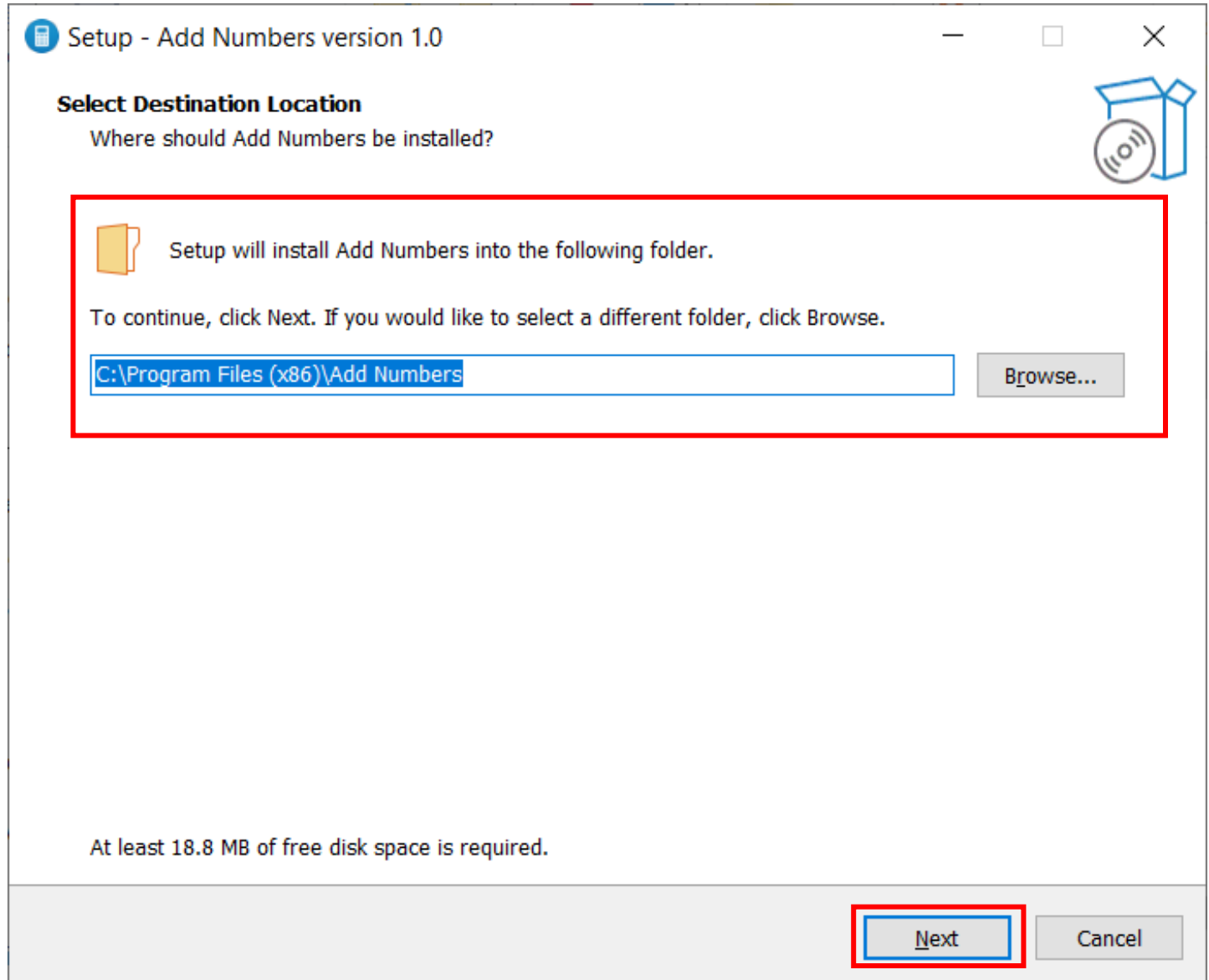


DEPLOYMENT OF NEWLY DEVELOPED SOFTWARE IN WINDOWS

Step 1: Click and Run the Setup Software



Step 2: Select the **Location to Install Real Desktop Software** in Windows



Setup - Add Numbers version 1.0

Select Destination Location
Where should Add Numbers be installed?

Setup will install Add Numbers into the following folder.

To continue, click Next. If you would like to select a different folder, click Browse.

C:\Program Files (x86)\Add Numbers

At least 18.8 MB of free disk space is required.

Step 3: Selection of Additional Tasks

Setup - Add Numbers version 1.0

Select Additional Tasks

Which additional tasks should be performed?

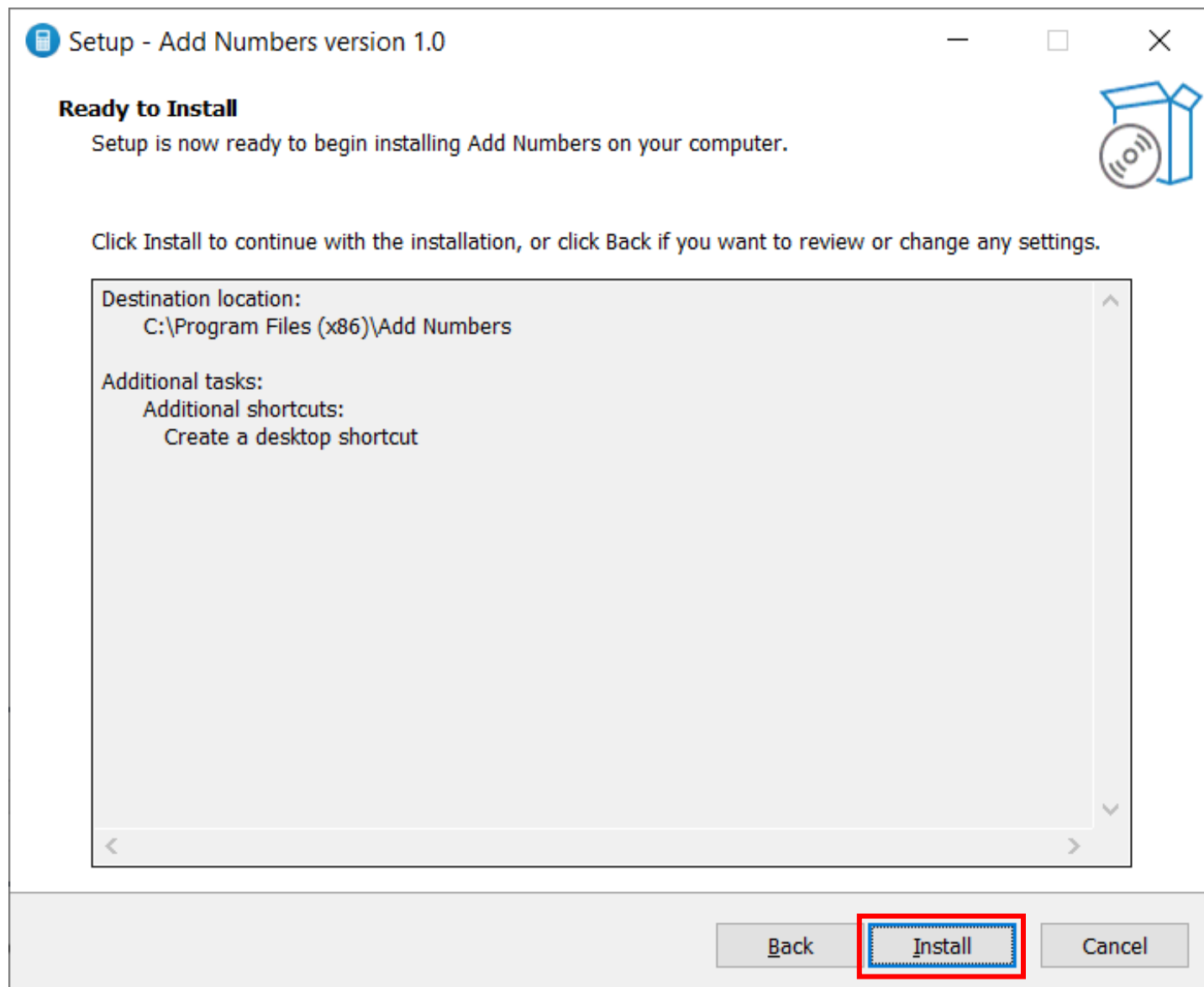
Select the additional tasks you would like Setup to perform while installing Add Numbers, then click Next.

Additional shortcuts:

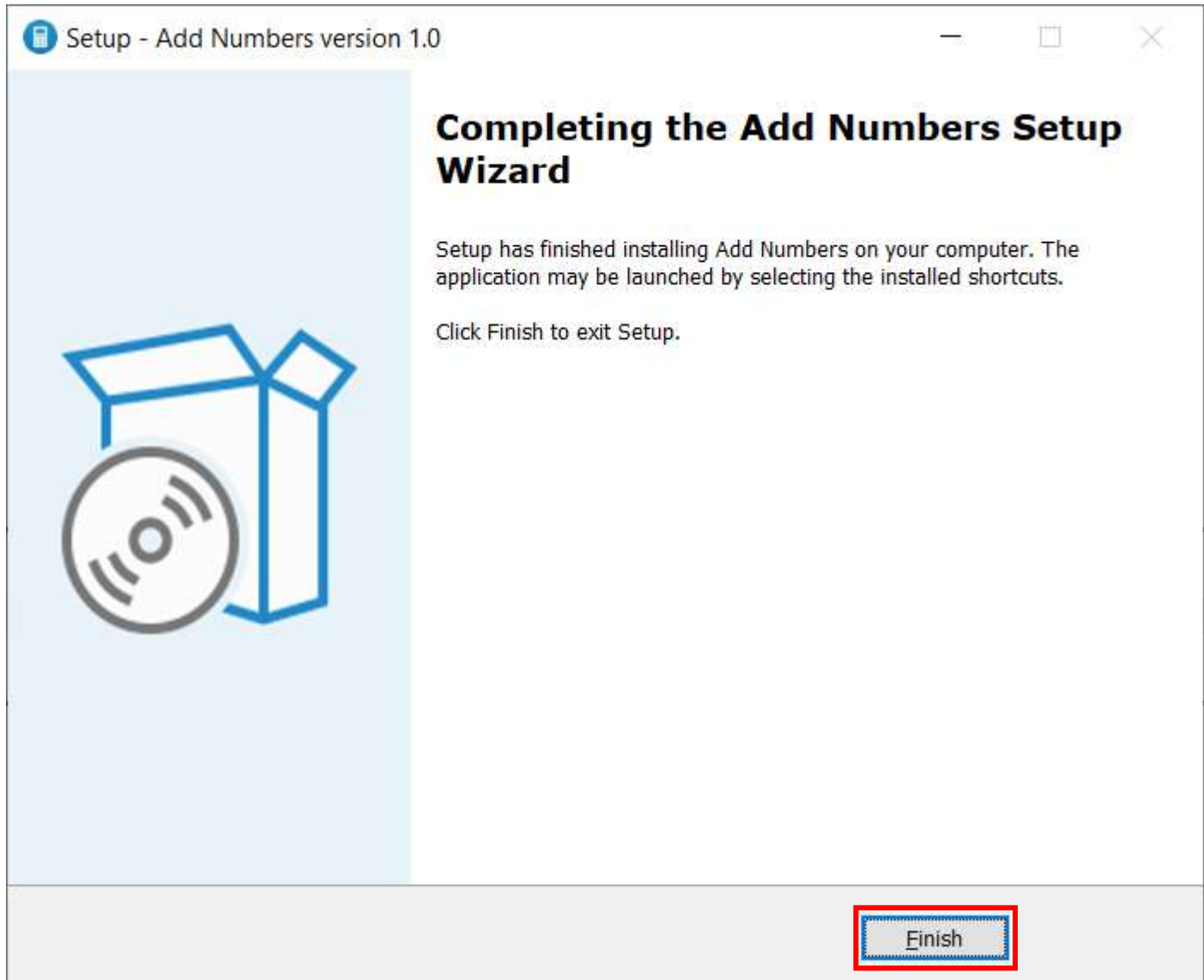
☒ Create a desktop shortcut

Back Next Cancel

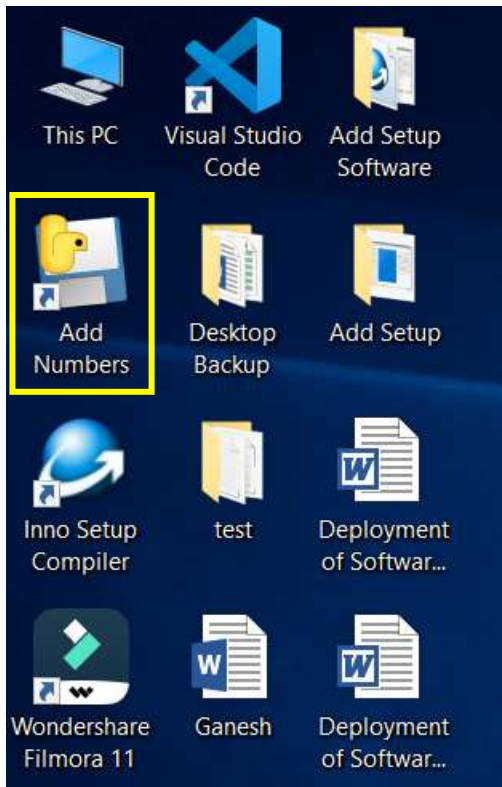
Step 4: Ready for Installing Software



Step 5: Completion Status



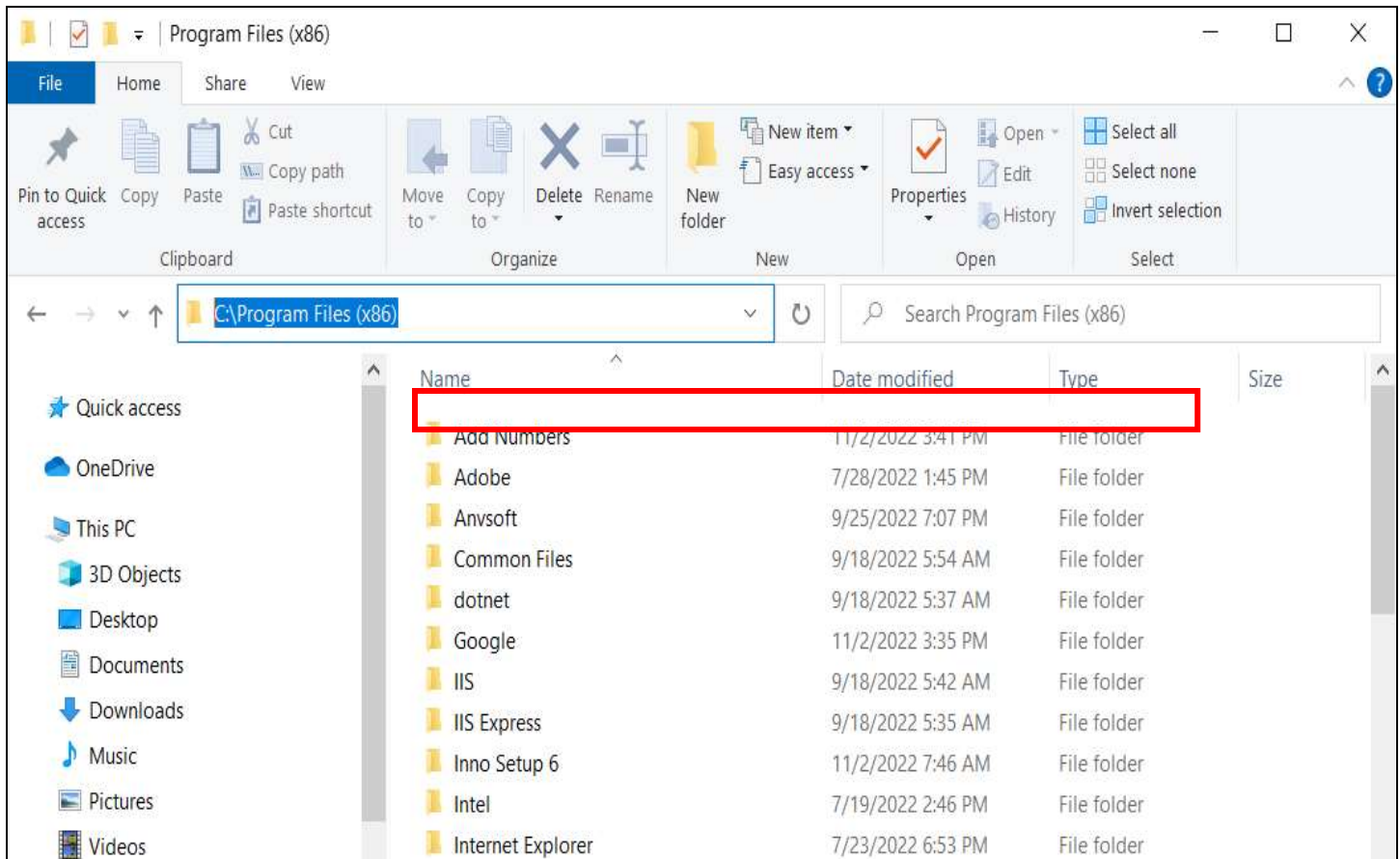
Verification of Software in Desktop



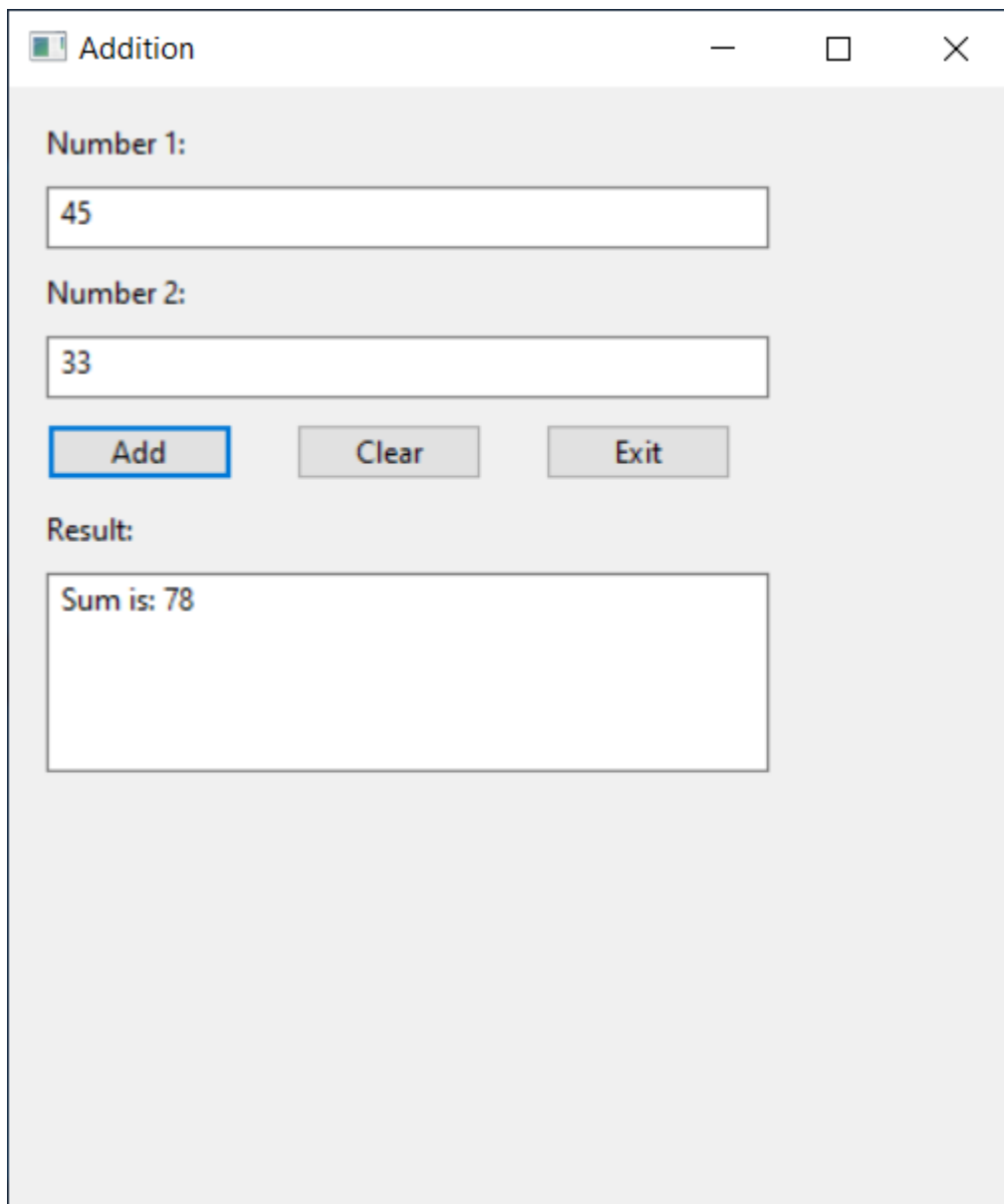
Verification of Software in Program and Features of Control Panel

Audacity 3.1.3	Audacity Team	8/27/2022	87.8 MB	3.1.3
Apache NetBeans IDE 14	Apache NetBeans	7/20/2022		14
Android Studio	Google LLC	7/23/2022		2021.2
Adobe Photoshop 2022	Adobe Inc.	7/28/2022	3.71 GB	23.1.0.143
Adobe Acrobat (64-bit)	Adobe	10/25/2022	541 MB	22.003.20263
Add Numbers version 1.0	MIT India	11/2/2022	18.7 MB	1.0
ActivePresenter	Atomi Systems, Inc.	7/19/2022	193 MB	8.5.7

Verification of Software in C/Program Files (x86)



Running Newly Created Desktop Software



The screenshot shows a Windows application window titled "Addition". The window has a standard Windows title bar with minimize, maximize, and close buttons. The interface is light gray and contains the following elements:

- Number 1:** A text input field containing the value "45".
- Number 2:** A text input field containing the value "33".
- Buttons:** Three buttons are located below the input fields: "Add" (highlighted with a blue border), "Clear", and "Exit".
- Result:** A text area below the buttons displaying the text "Sum is: 78".