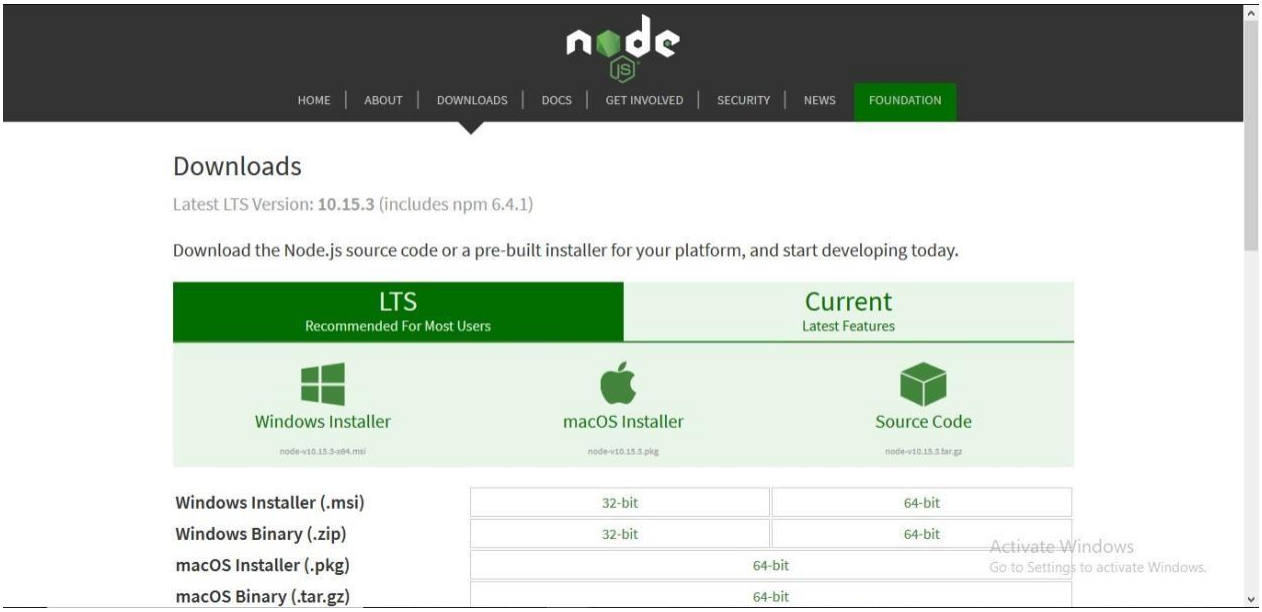
PRACTICAL - 1

AIM : Setup environment for Angular framework by Installing Node.js, npmpackage manager using editor like Visual Code.

➢ Installing Node js on Windows

Step-1: Downloading the Node.js installer.

The first step to install Node.js on windows is to download the installer. Visit the official Node.js website i.e) **https://nodejs.org/en/download/** and download the .msi file according to your system environment (32-bit & 64-bit). An MSI installer will be downloaded on your system.

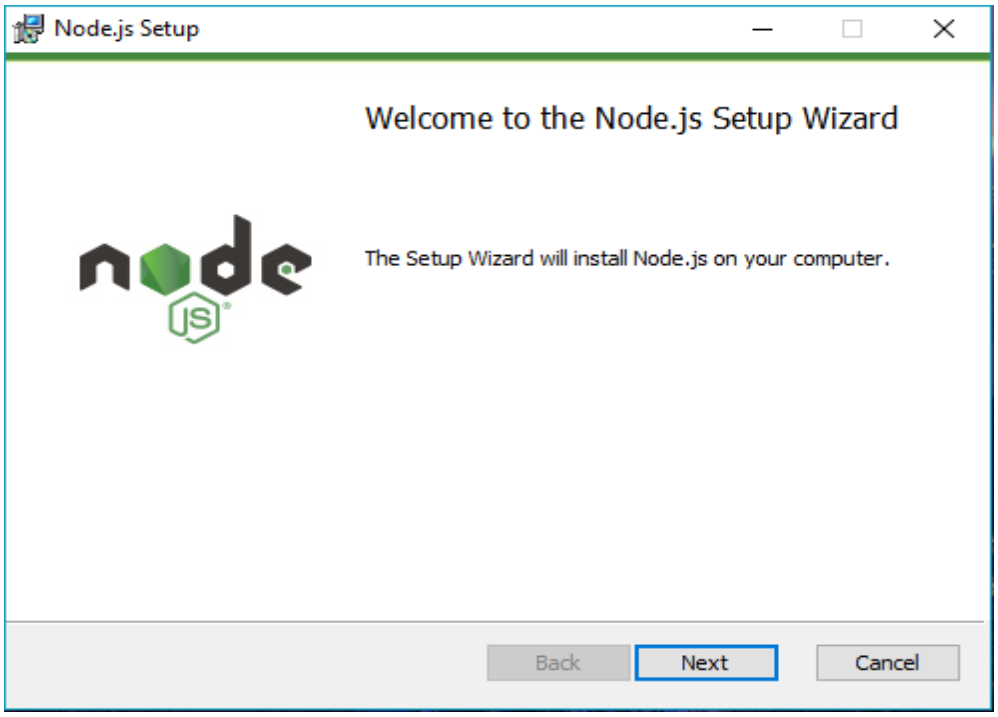


Step-2: Running the Node.js installer.

Now you need to install the node.js installer on your PC. You need to follow the following steps for the Node.js to be installed:-

- Double click on the .msi installer.
  The Node.js Setup wizard will open.

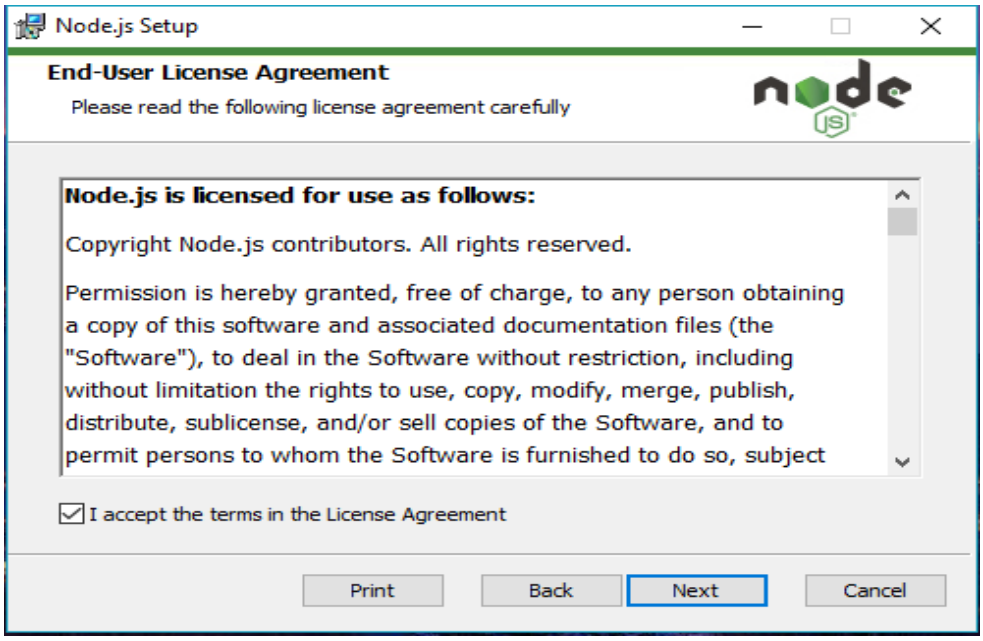
- Welcome To Node.js Setup Wizard.
  Select "Next"



- After clicking “Next”, End-User License Agreement (EULA) will open.

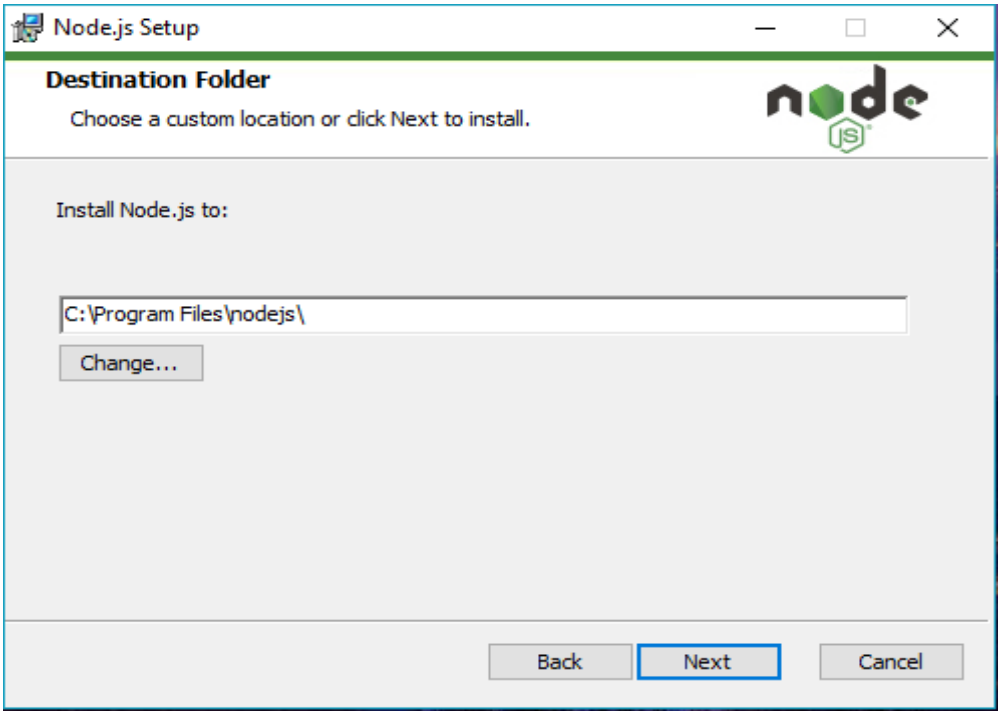
Check “I accept the terms in the License Agreement”

Select “Next”



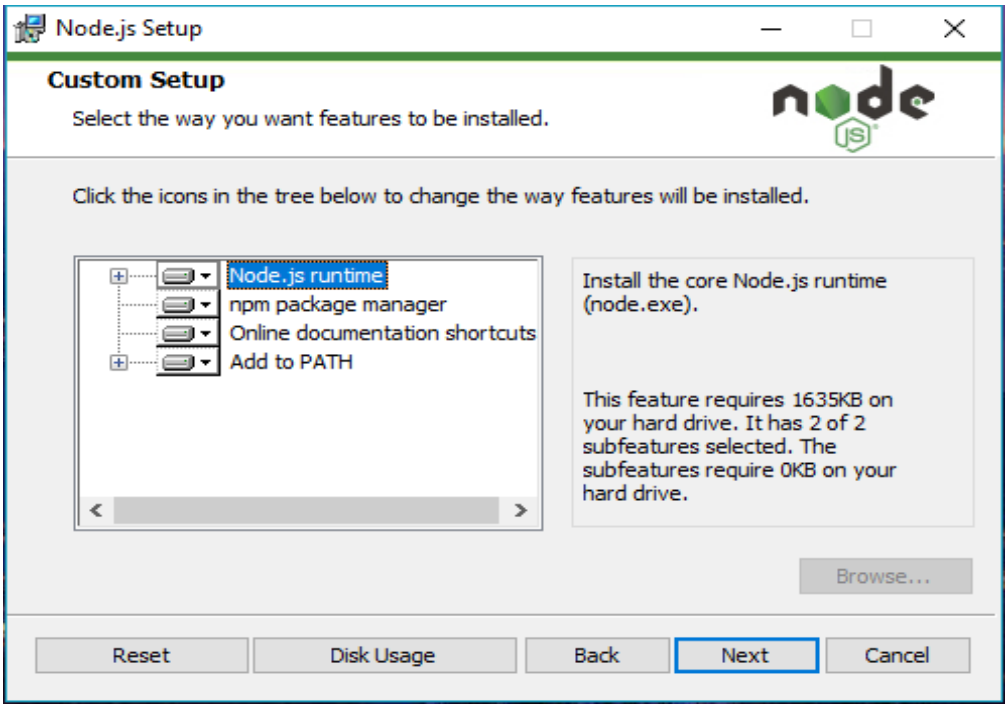
- Destination Folder

Set the Destination Folder where you want to install Node.js & Select "Next"



- Custom Setup

Select "Next"

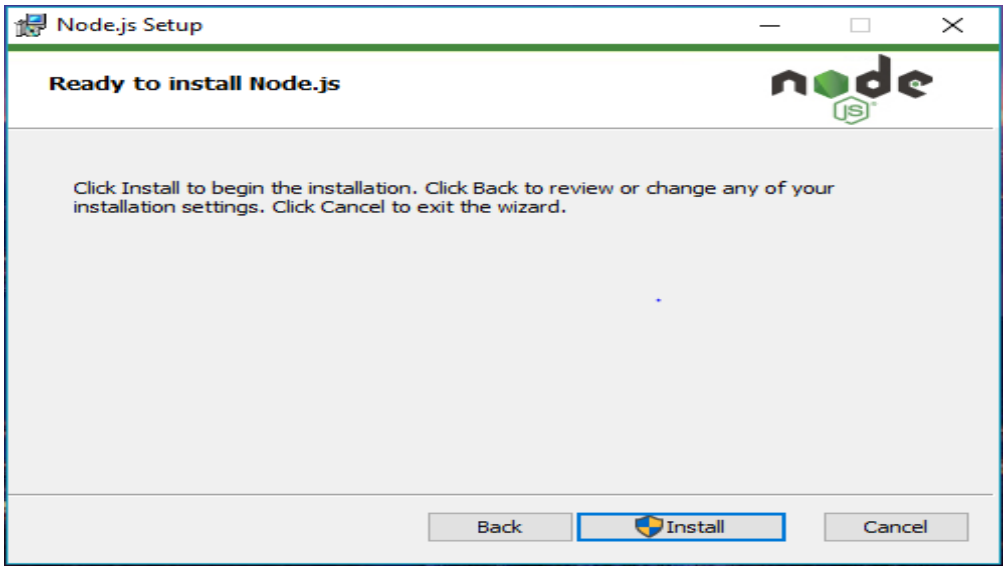


- Ready to Install Node.js.

  The installer may prompt you to “install tools for native modules”.

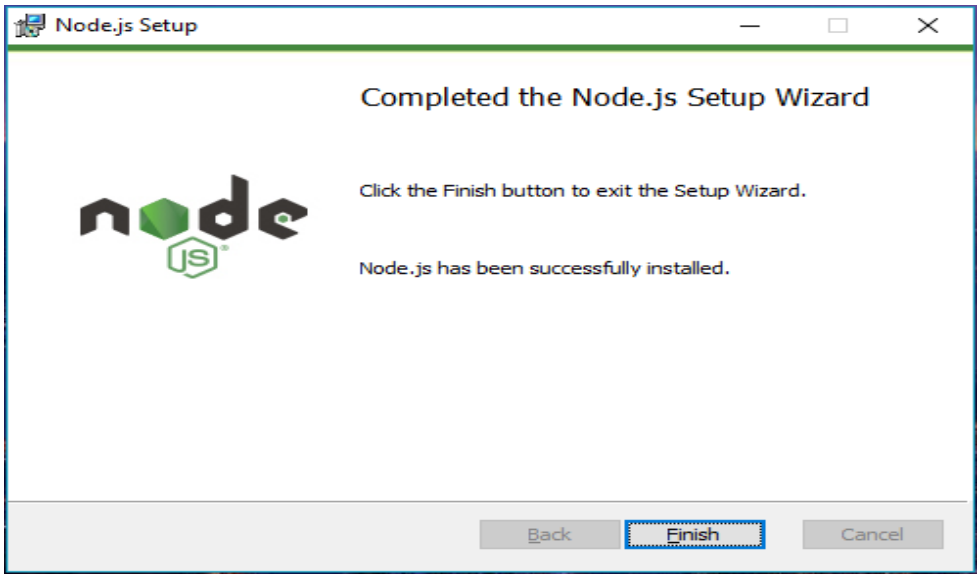
  For more information on whether you need this, see here.

  Select “Install”



- Installing Node.js.
  Do not close or cancel the installer until the install is complete
- Complete the Node.js Setup Wizard.

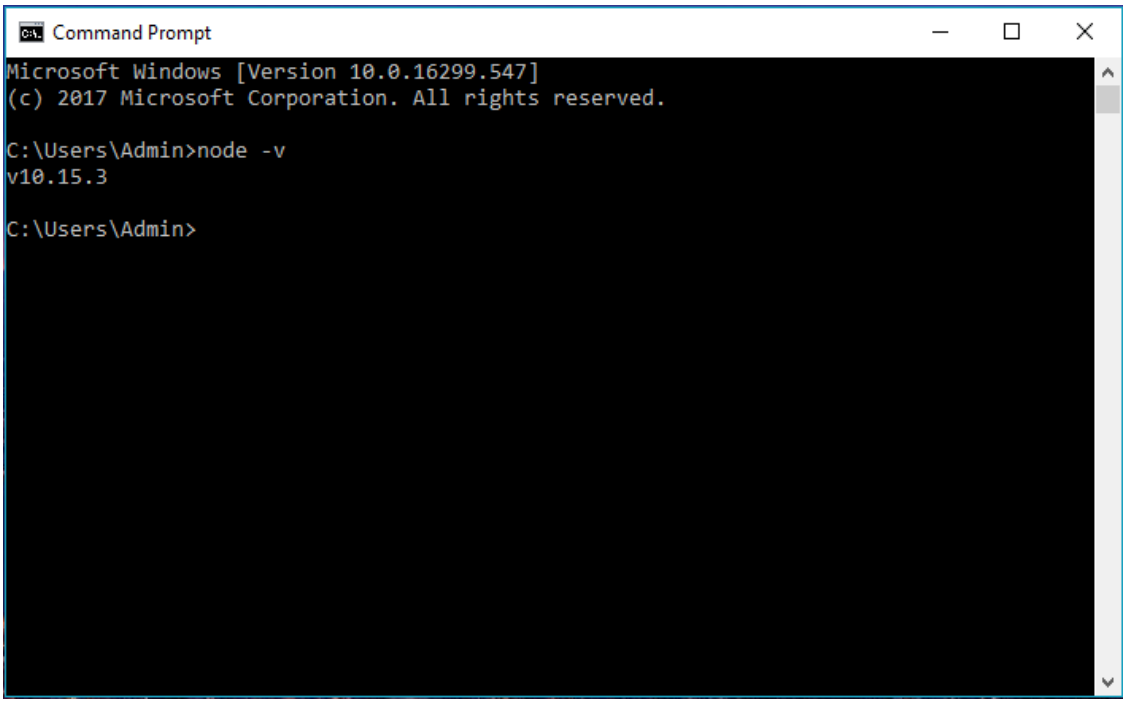
  Click “Finish”



Step 3: Verify that Node.js was properly installed or not.

To check that node.js was completely installed on your system or not, you can run the following command in your command prompt or Windows Powershell and test it:-

C:\Users\Admin> node -v



If node.js was completely installed on your system, the command prompt will print the version of the node.js installed.

If you get a message back saying node was not found, then add it to the path manually:

Adding to the path:
You should not need to do anything to the system variables, as the windows installer takes care of the system variables itself while installing through the .msi installer.

If you use any other format for installing node.js on your PC, you should put the system variable path for node.js as follows:

`PATH : C:\Users\{username}\AppData\Roaming\npm C:\Program Files\`*`{path to the nodejs folder}`*
for example:

```
PATH : C:\Users\admin\AppData\Roaming\npm C:\Program Files\nodejs
```

Note: After adding to the PATH, restart the command line, because PATH is only loaded when initializing new command line sessions.

Step 4: install the Local npm version.
The final step in node.js installed is the install of your local npm version(if required) – the package manager that comes bundled with Node.js

You can run the following command, to quickly the npm

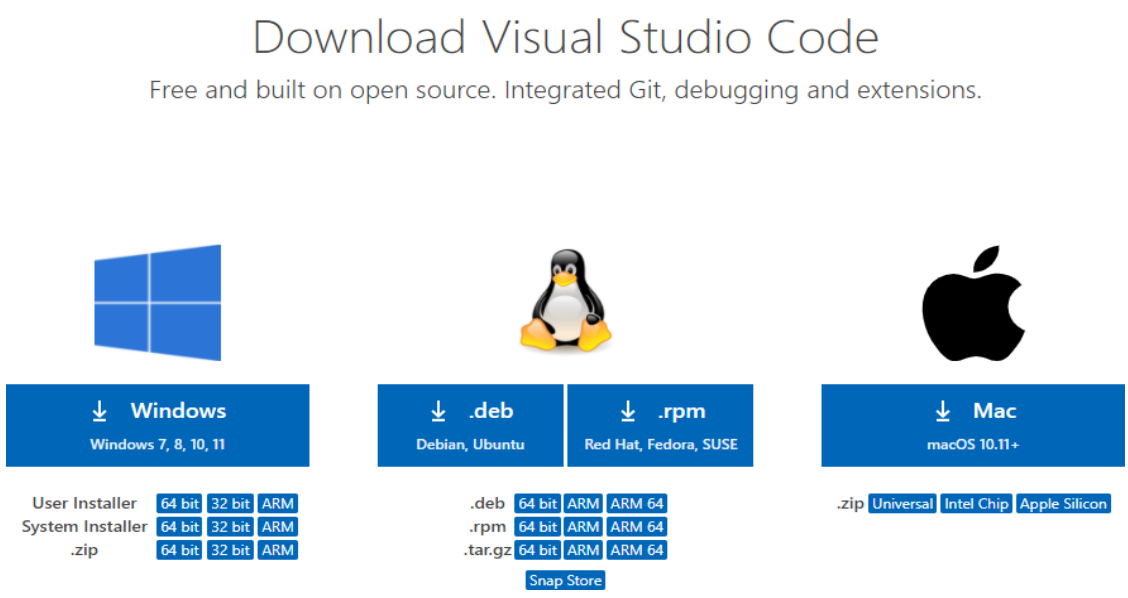
npm install –g @angular/CLI

➢ Installing Visual Studio Code on Windows

Follow the below steps to install Visual Studio Code on Windows:

Step 1: Visit the official website of the Visual Studio Code using any web browser like Google Chrome, Microsoft Edge, etc.

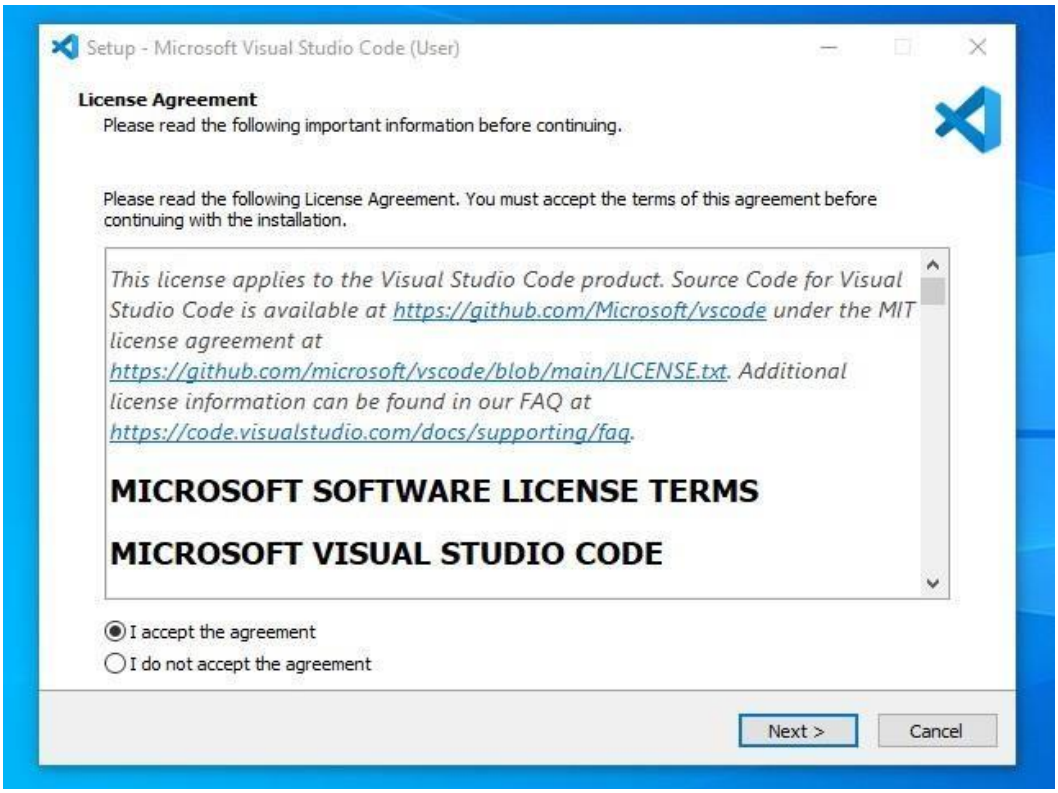
Step 2: Press the "**Download for Windows**" button on the website to start the download of the Visual Studio Code Application.



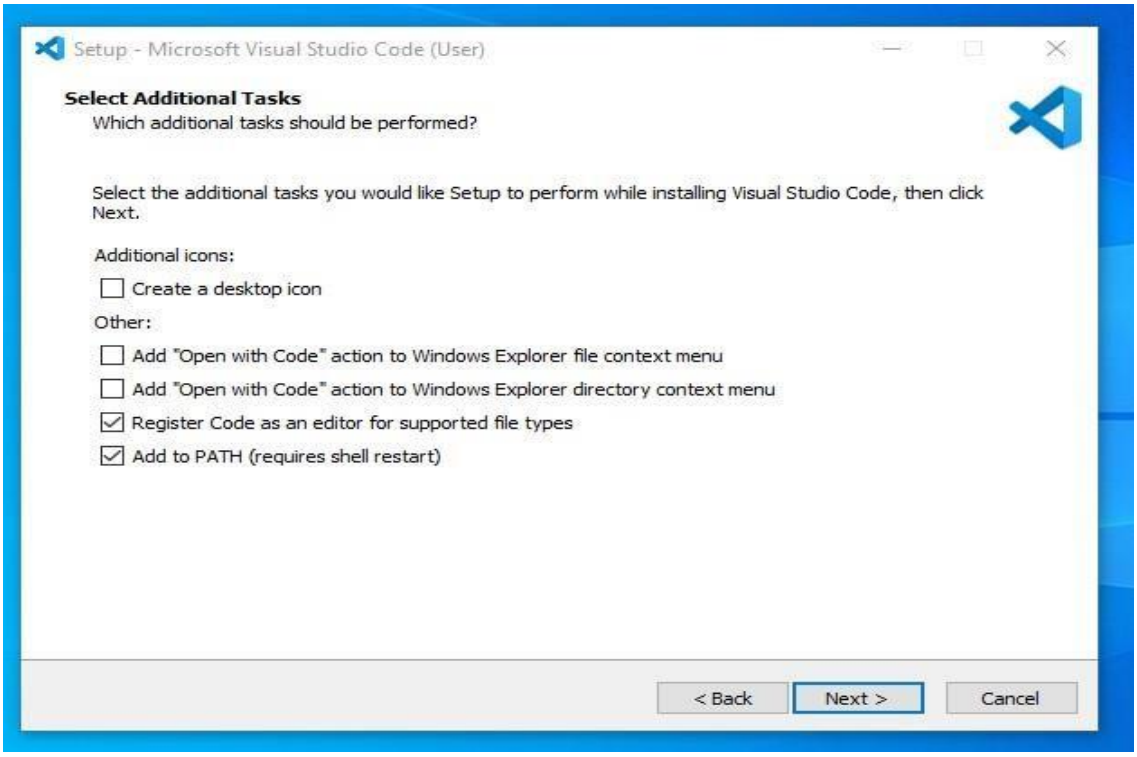
Step 3: When the download finishes, then the Visual Studio Code icon appears in the downloads folder.

Step 4: Click on the installer icon to start the installation process of the Visual Studio Code.

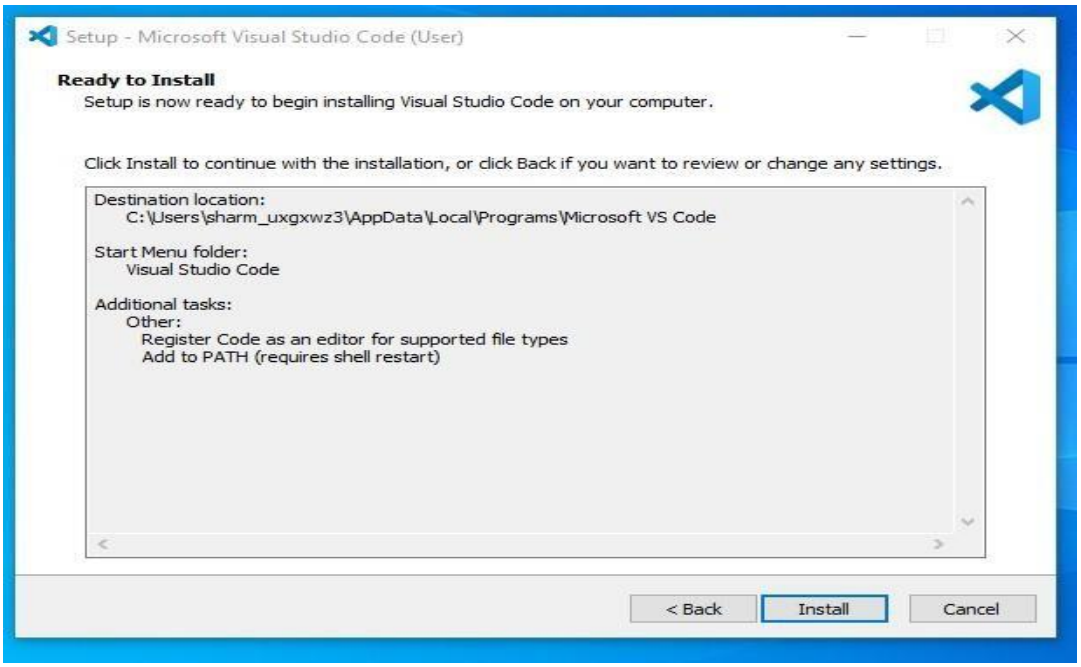
Step 5: After the Installer opens, it will ask you for accepting the terms and conditions of the Visual Studio Code. Click on **I accept the agreement** and then click the **Next** button.



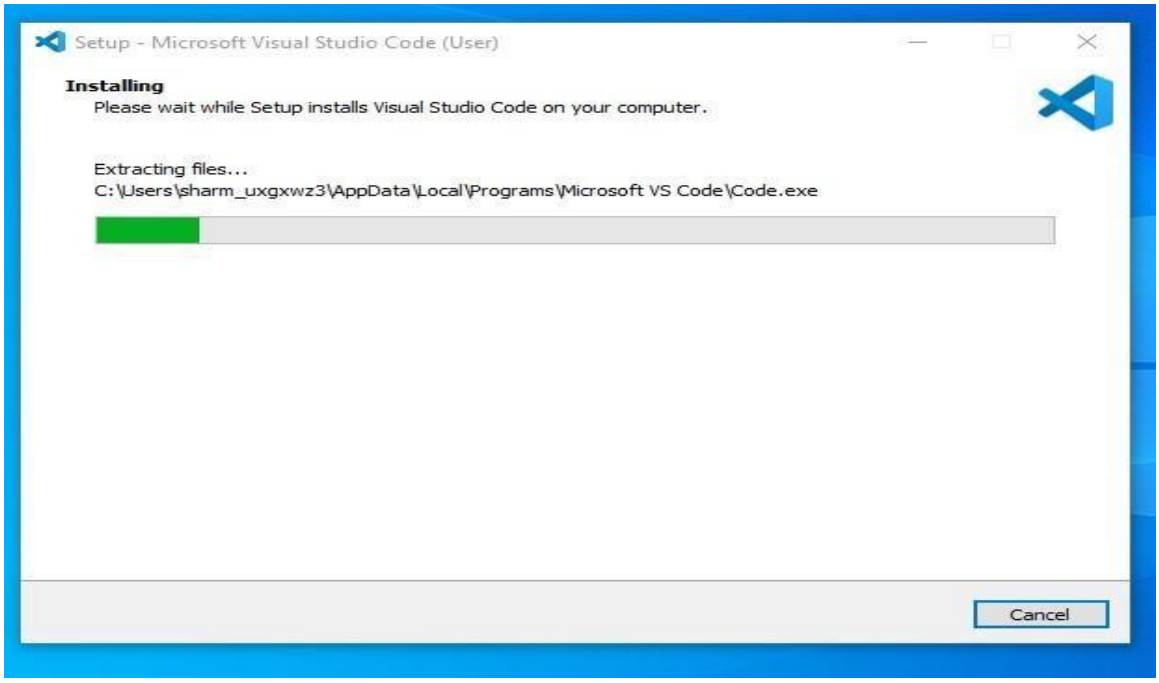
Step 6: Choose the location data for running the Visual Studio Code. It will then ask you for browsing the location. Then click on **Next** button.



Step 7: Then it will ask for beginning the installing setup. Click on the **Install** button.

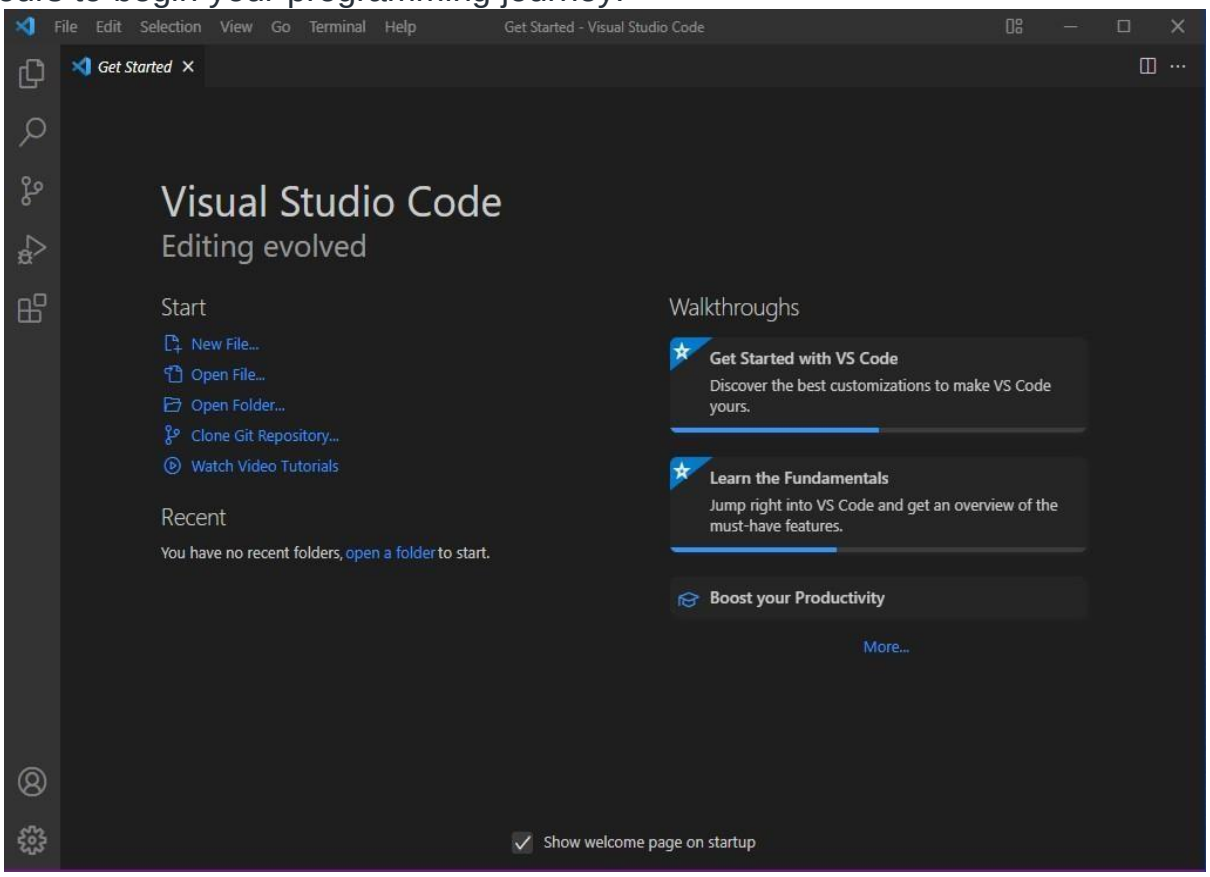


Step 8: After clicking on Install, it will take about 1 minute to install the Visual Studio Code on your device.



Step 9: After the Installation setup for Visual Studio Code is finished, it will show a window like this below. Tick the "**Launch Visual Studio Code**" checkbox and then click **Next**.

Step 10: After the previous step, the **Visual Studio Code window** opens successfully. Now you can create a new file in the Visual Studio Code window and choose a language of yours to begin your programming journey!



So this is how we successfully installed **Visual Studio Code** on our Windowssystem.

PRACTICAL-2

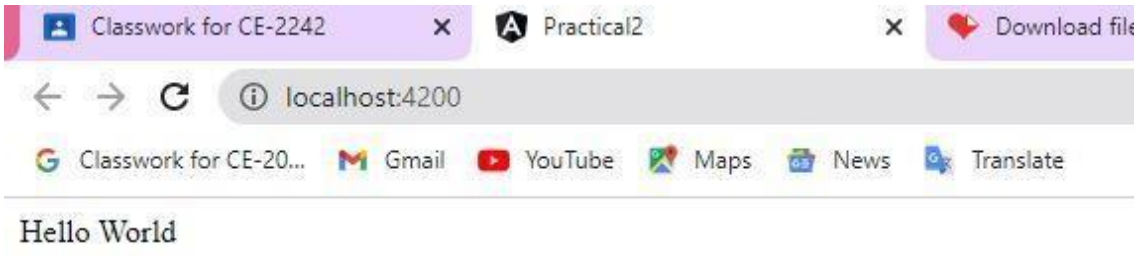
AIM:-Create first application to print Hello World message using angular framework.

CODE:-

```
import { Component } from '@angular/core';

@Component({
  selector: 'app-root',
  templateUrl: './app.component.html',
  styleUrls: ['./app.component.css']
})
export class AppComponent {
  title = 'practical-2';
  hello = 'Hello World'
}
```

OUTPUT:-



PRACTICAL - 3

Aim:-Design a web page to utilize property binding and event binding concepts using button and textbox controls.

Code:

Appcomponents.ts

```
import { Component } from '@angular/core';
import { RouterOutlet } from '@angular/router';
import { FormsModule } from '@angular/forms';
import { CommonModule } from '@angular/common';
@Component({
 selector: 'app-root',
 standalone: true,
 imports: [RouterOutlet, FormsModule, CommonModule],
 templateUrl: './app.component.html',
 styleUrl: './app.component.css'
})
export class AppComponent {
 name: string = '';
 greting: string = '';
 greet() {
  if (this.name) {
   this.greting = `Hello, ${this.name}`;
  } else {
   this.greting = 'Please Enter your name';
  }
 }
}
```

app.component.html

```
<div>
 <label> Enter your name:</label>
 <input type="text" [(ngModel)]="name">
 <button (click)="greet()">Great</button>
```

```
</div>
<div *ngIf="greting">
 {{greting}}
</div>
```

Output :

Enter your name: XYZ Great
Hello, XYZ