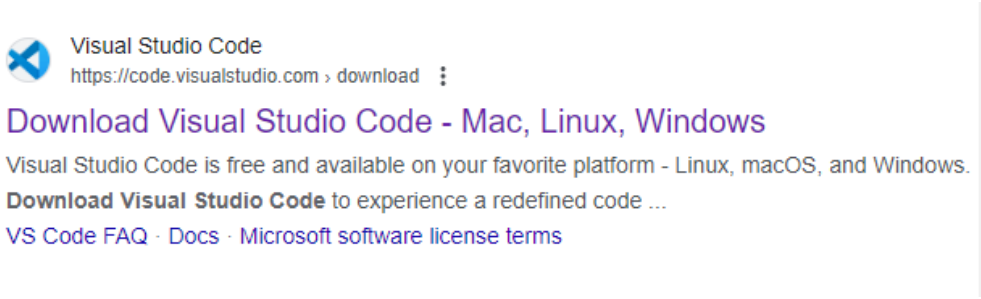
SE-Assignment-5

Questions 1

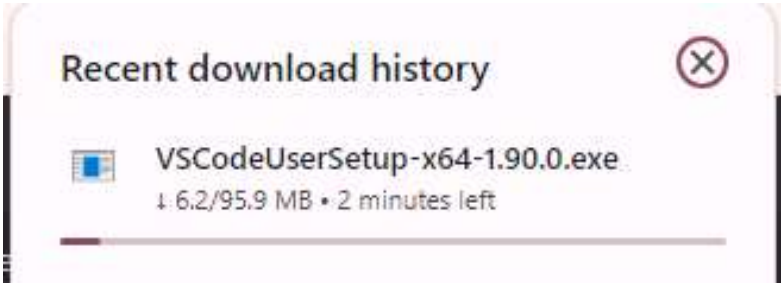
Step 1:

Click the link that was given therefore it will link you to the website “Visual Studio Code” Download page https://code.visualstudio.com/Download, if it doesn’t work, use your preferred browser and search “Download visual studio code” click on this image below:



Step 2:

Because my Operating System is Windows 10, I’ll then click on the blue box that has “Windows – Windows 10, 11” on it. It will automatically be downloaded

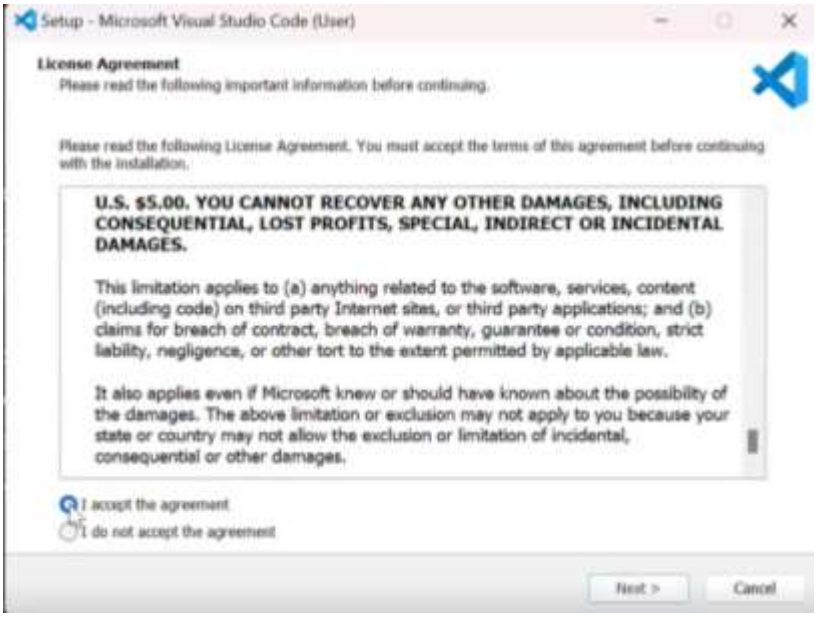


Step 3:

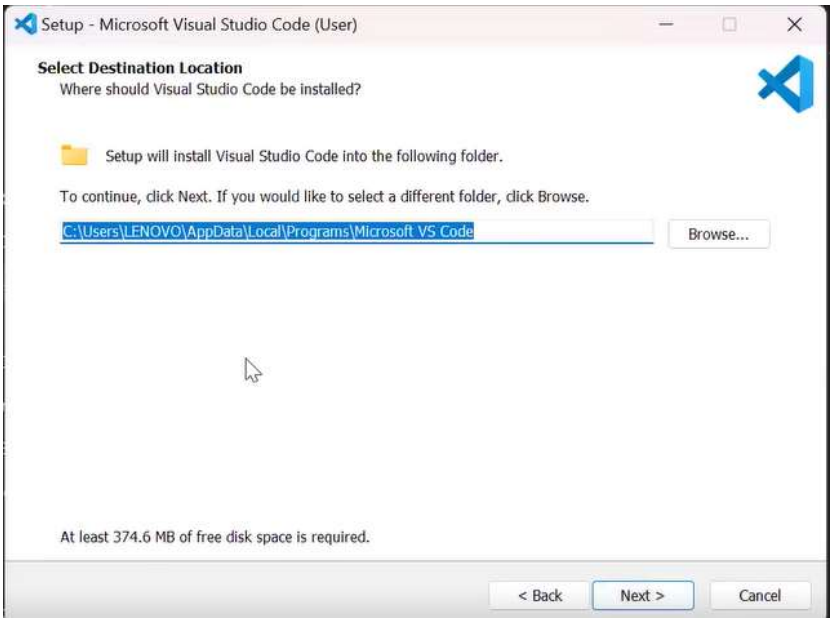
Click on open folder then on your downloads you will right click and “run as administrator”

Step 4:

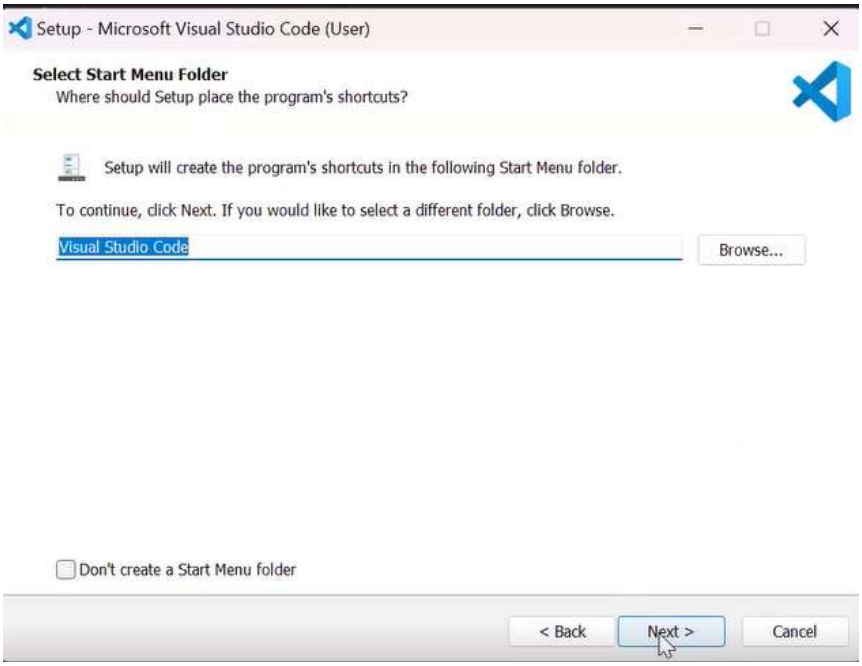
Then it will lead you to the setup menu then you:



Step 5: Then you will click on" I accept button then "next"

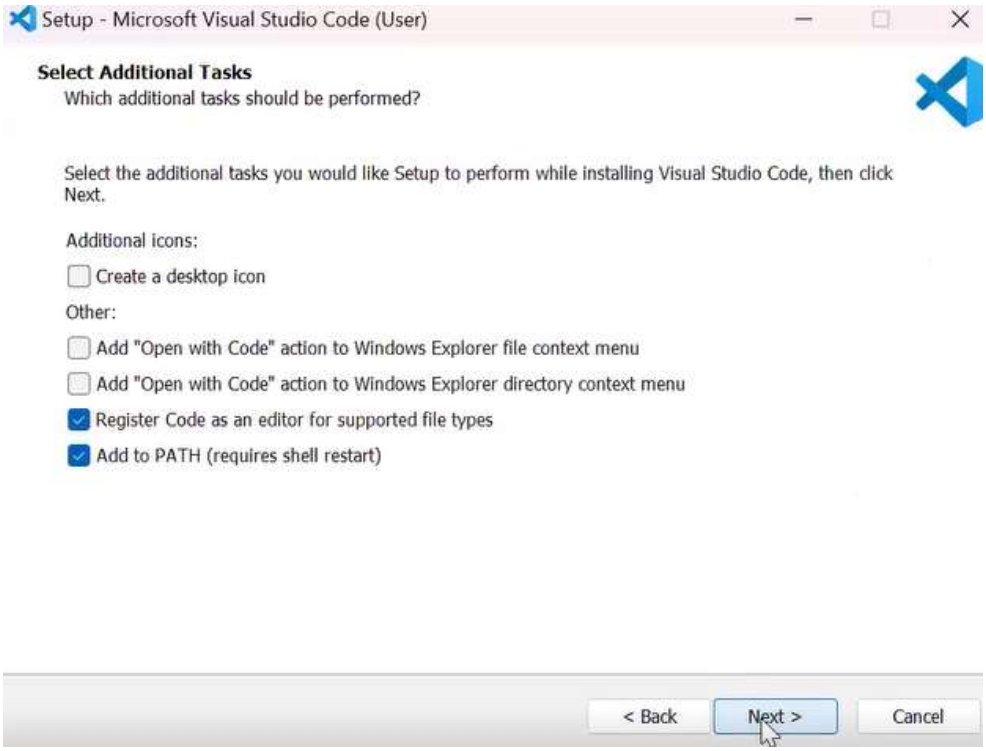


Step 6: It will lead you to a next page which will have a default file path for you and then you just enter "Next"



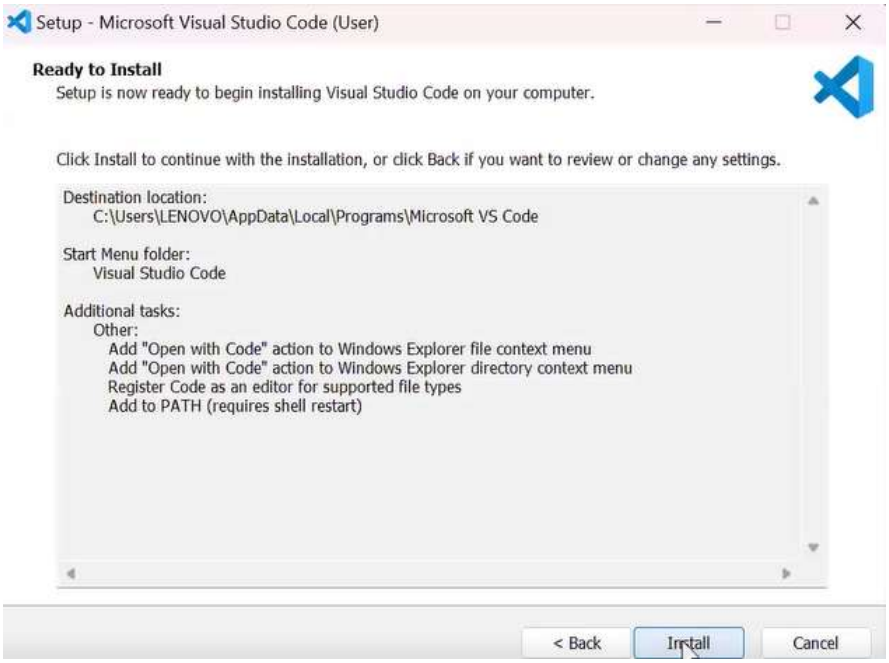
Step 7: Select Smart Folder

Don't click anything just Click "Next".



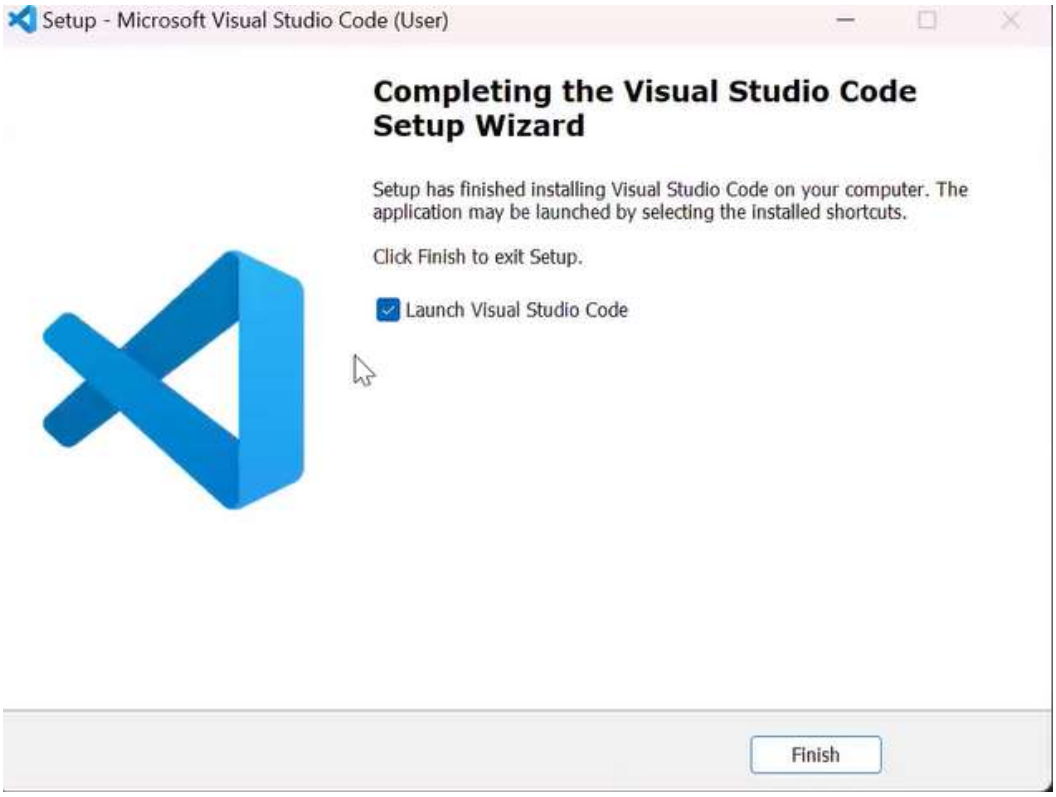
Step 8: Select Additional Tasks

Tick all boxes then click "Next".

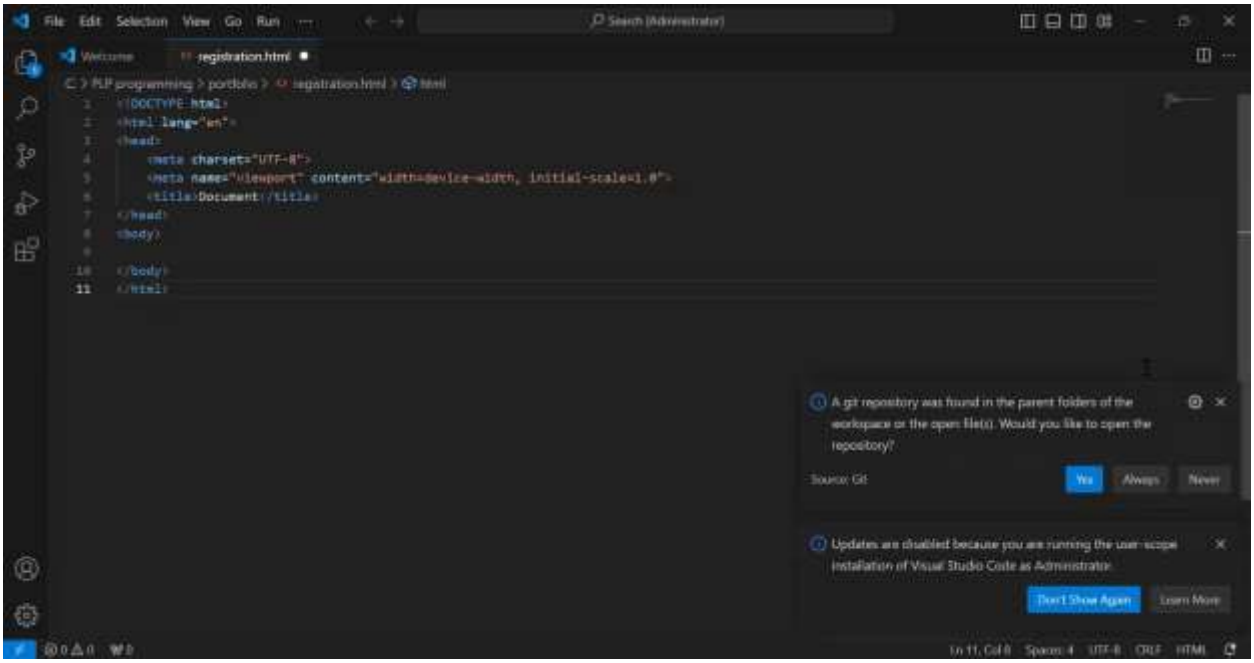


Step 9: Ready to Install

Click “Install”



Step 10: After it has installed it will bring us to this page then click “Finish”



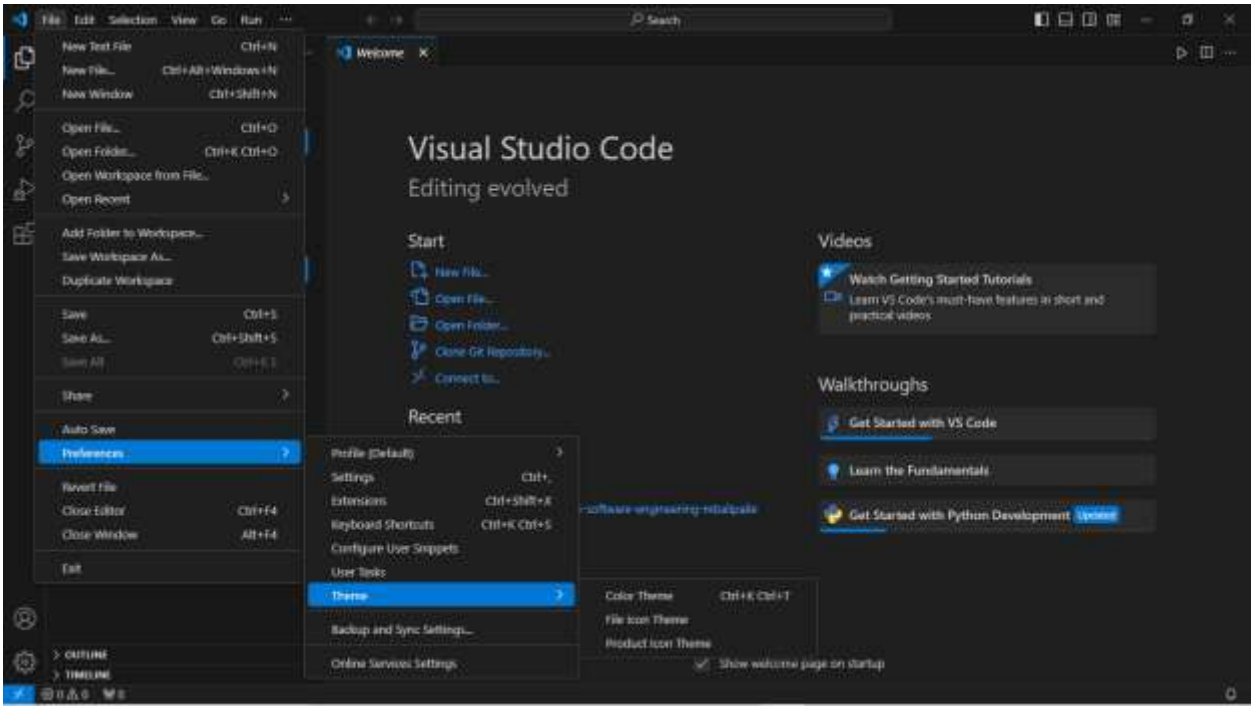
Step 11: Then the application will now launch

These are what are needed to have VScode installed in your PC:

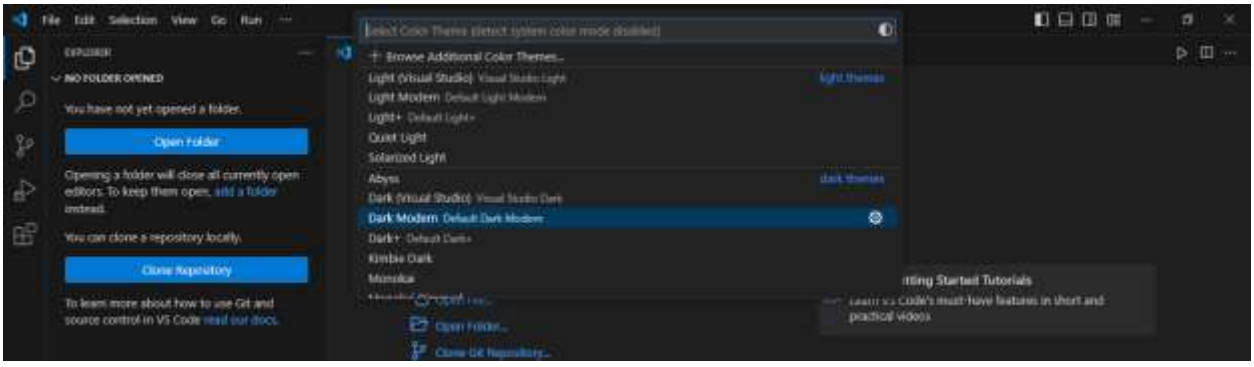
- At least have Windows 10 or 11 or later versions to install
- It is compatible for MacOS, Linux and Windows
- Make sure you have space in your PC
- Insure you have access to internet connection to install everything
- Ensure your computer has enough power (CPU, RAM) and space to run VS Code smoothly.

Questions 2

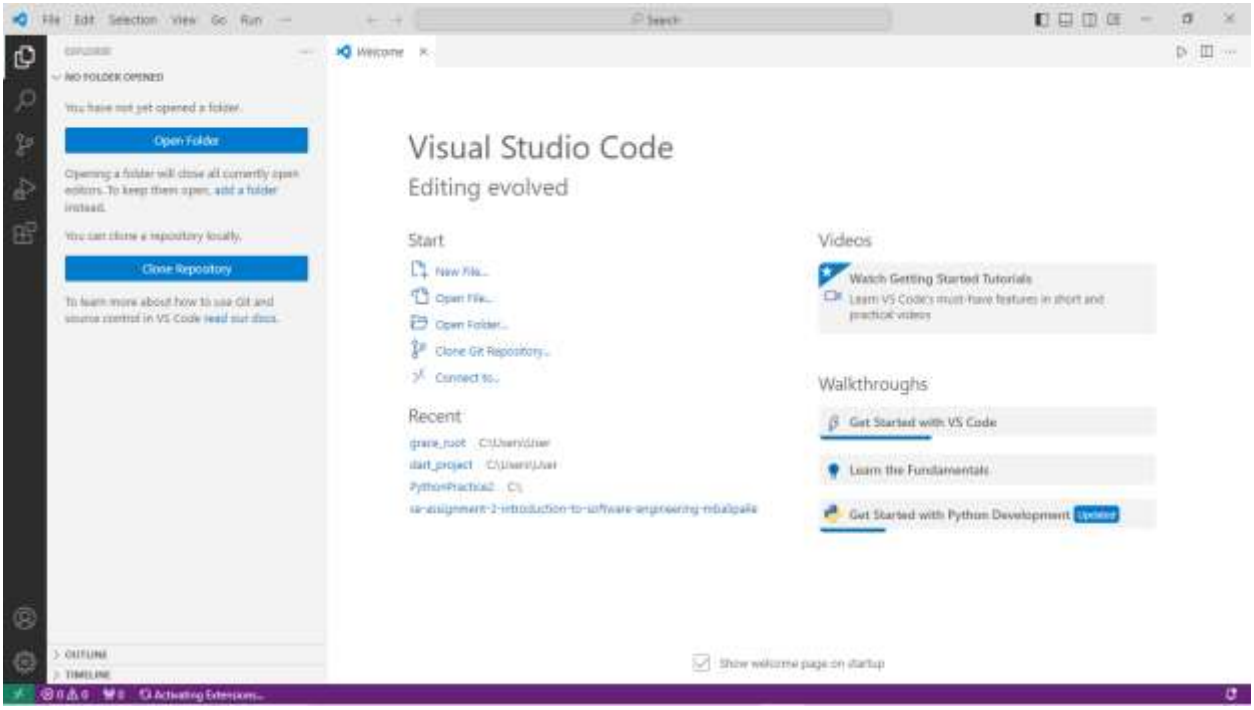
- Firstly you can change the theme of the environment to your preference. There is Light and Dark theme.



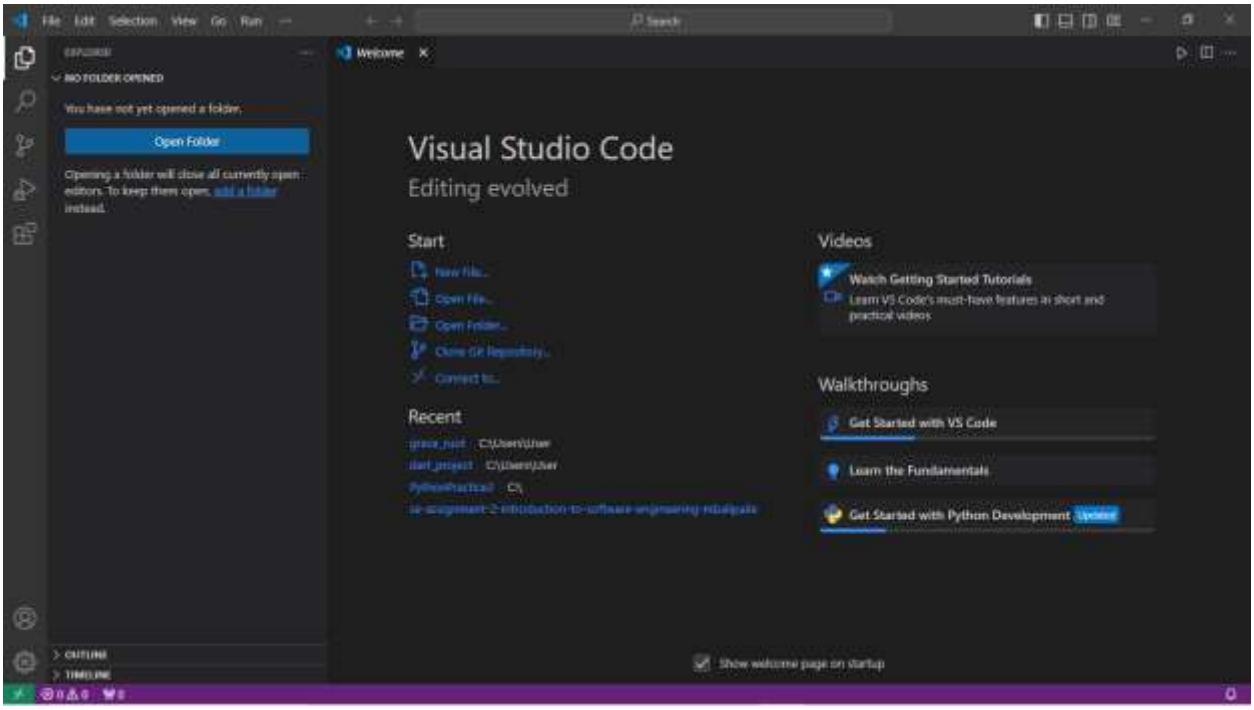
File – Preferences – Theme – Color Theme



Then you can choose your favorable theme

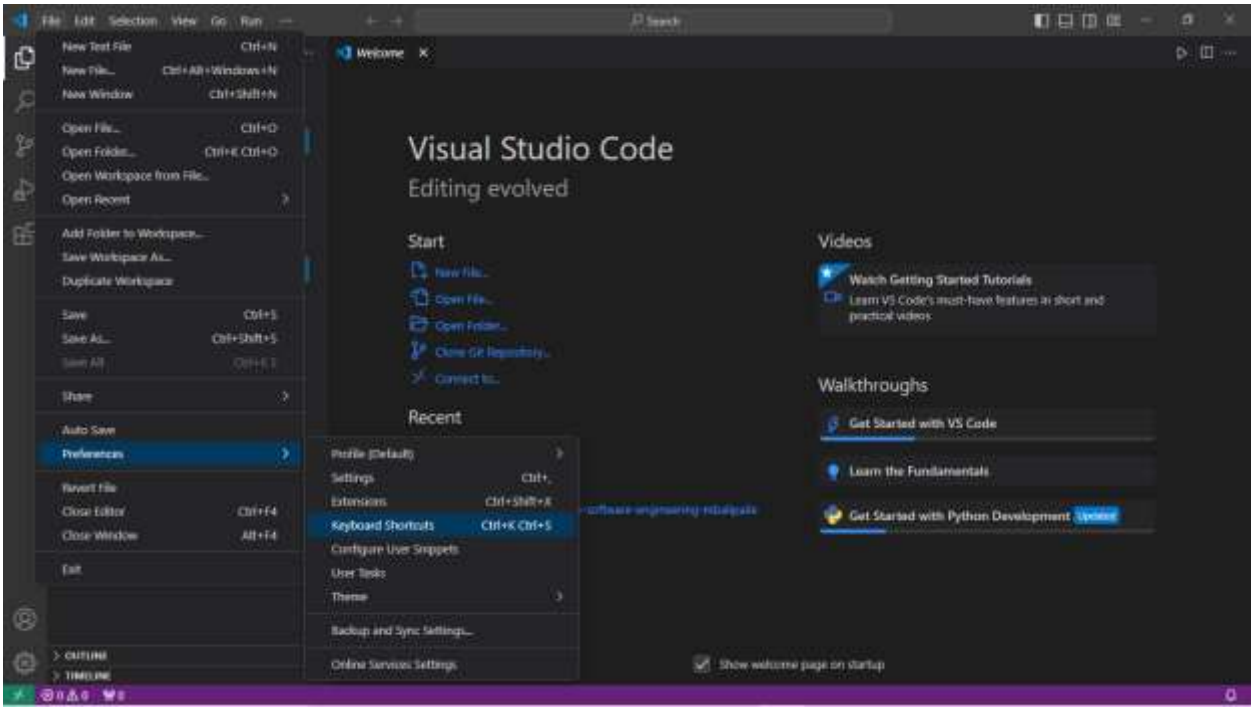


Example one: Light + Default Light+

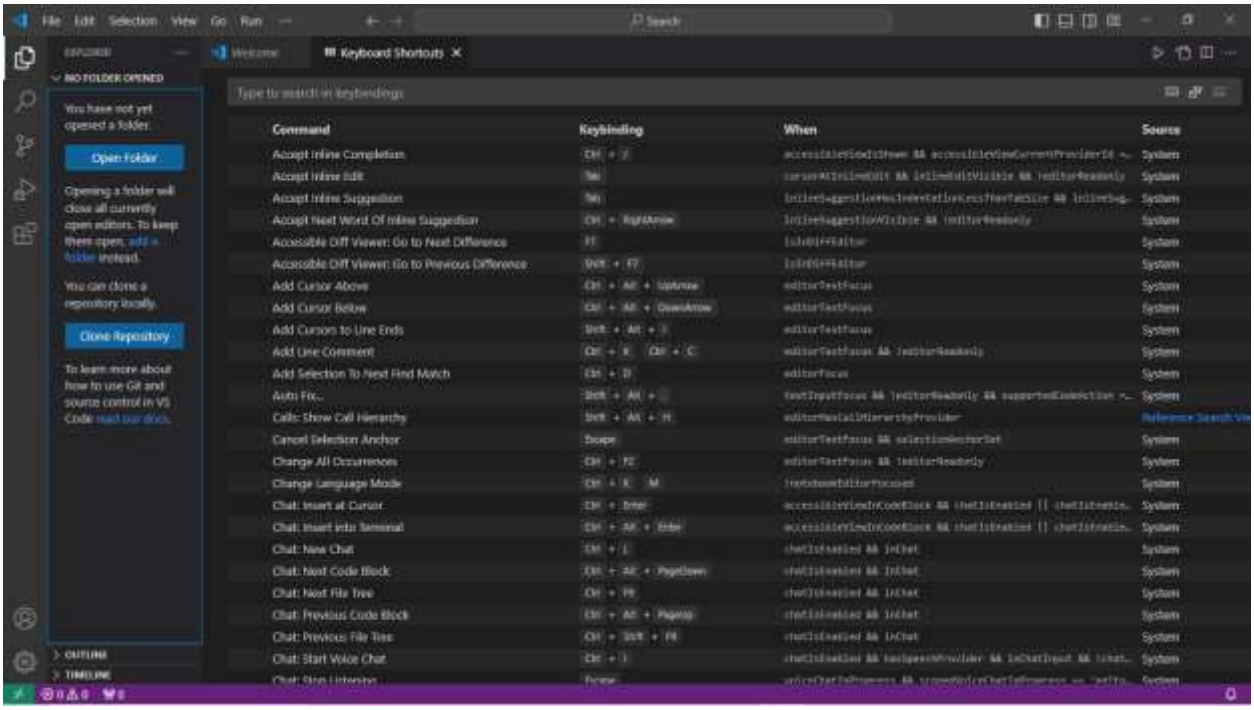


Example 2: Dark (Visual Studio) Visual Studio Dark

- Next up is your Keyboard shortcuts, which can help with navigating through your coding journey in a much faster way, you can do the learning and find the Keyboard shortcut through the following steps below:

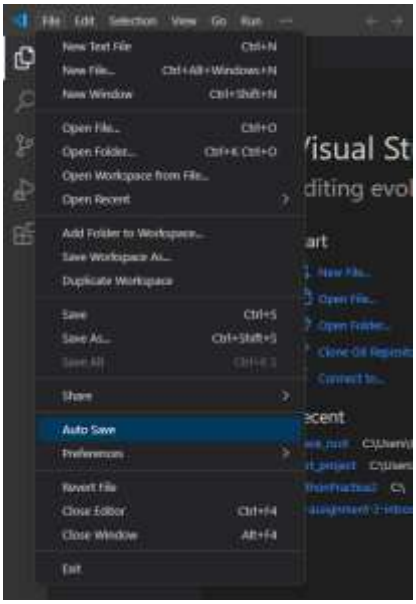


File – Preferences – Keyboard Shortcuts OR on your keyboard type Ctrl+K Ctrl + S

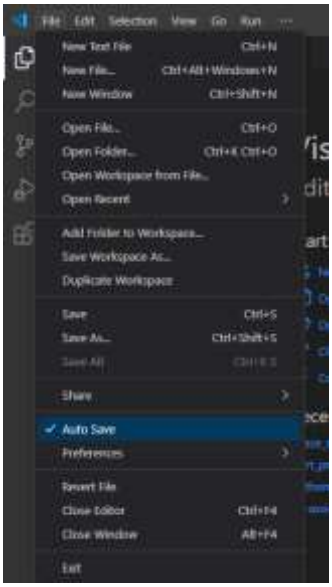


All done you can search the commands and navigate through to familiarize yourself.

- Next to configure the auto save settings



File – Auto Save



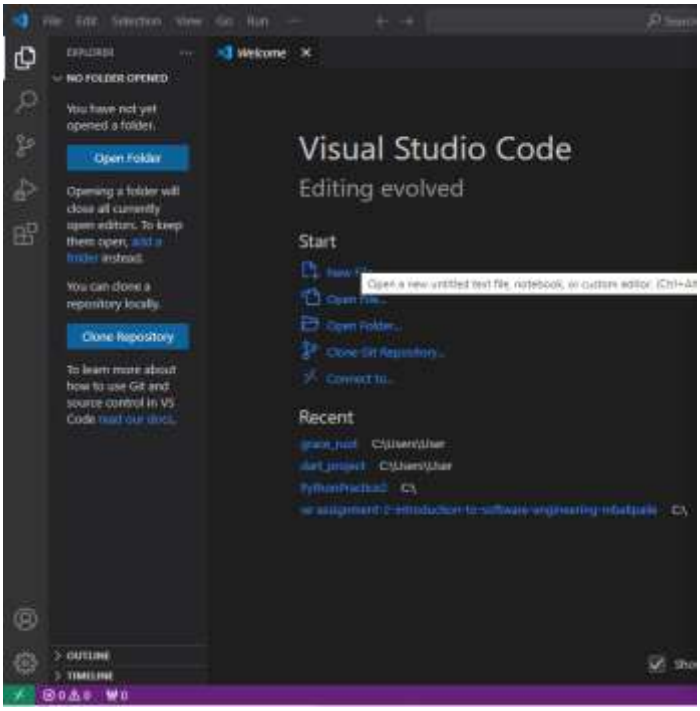
Done, now work will not be lost.

- Next Extensions:

Control the configuration of installed extensions to optimize their functionality.

Questions 3

Activity Bar:



Situated vertically on the left side of the window, the activity bar offers swift access to various views such as the search, run and Debug, Extentions, Exporer,Source Control etc.

Therefore one thing to remember is that each icon matches to a distinct view or activity and can be selected to navigate among them.

Side Bar:

The Side Bar houses several panels that can be displayed or concealed as per the developer's needs.

Editor Group:

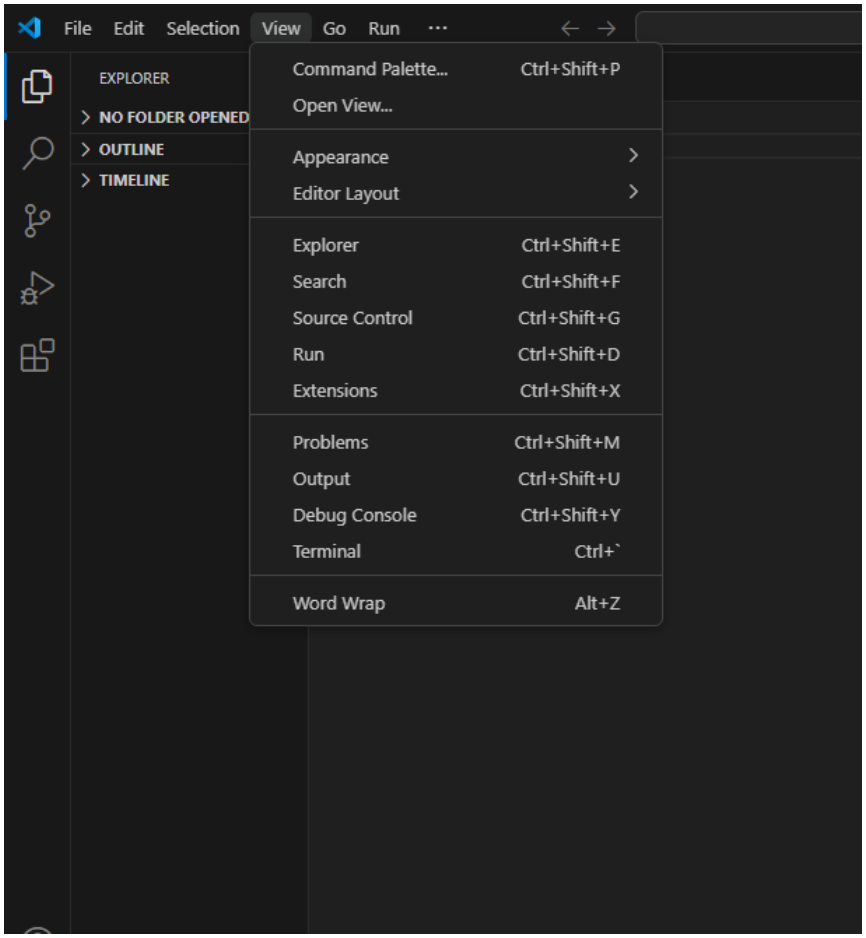
The main area in the window for editing and organizing code files includes a built-in terminal, supports several tabs, offers IntelliSense for completing code, and highlights syntax.

Status Bar:

The status bar within Visual Studio Code (VSCode) provides a wealth of information and enables quick access to many tasks, making it a most loved feature. It sits at the bottom of the VSCode window and contains multiple elements to help you manage your development environment and workflow.

Questions 4

Visual Studio Code (VS Code) contains a powerful Command Palette, which provides users with a simple and searchable interface to swiftly access a wide range of commands and features. This tool allows users to quickly access various editor functions without the need to navigate through menus or remember complex keyboard shortcuts.



You can access two ways via:

1. Menu Navigation: Go to the View menu at the top, then choose Command Palette.
2. Keyboard Shortcut: Use Ctrl + Shift + P on Windows

These are some examples of tasks that are common to use for Command Palette.

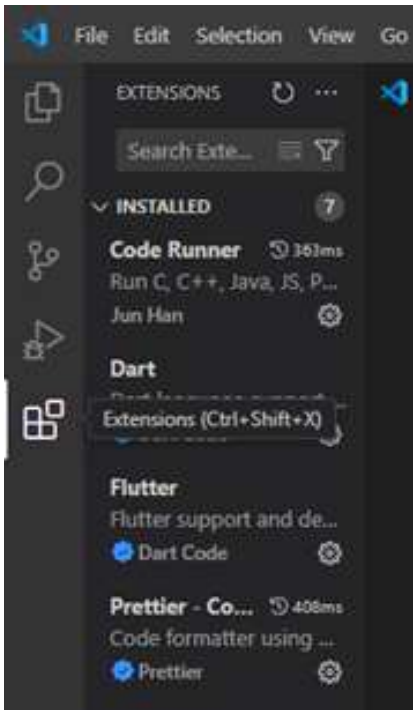
- When you want to run a task you can type “run Task” then click on what kind of task you will want to execute.
- When wanting to open a file you can type “Open File” then you can choose which file you would like to open.
- When wanting to format a code you can type “Format Document” then all files will be selected.
- When wanting to install extensions, you can type “Extensions: Install Extensions” for you to install and also search from the marketplace new extensions.

- When wanting to open a terminal within VS Code you can type “Terminal: Create New Integrated Terminal”
- To add a predefined code snippet you can type “Insert Snippet”

Questions 5

Enhancements within VS Code extensions are crucial for broadening its functionalities and customizing the editor to meet specific needs. They enhance functionalities, provide language support, strengthen debugging capabilities, and offer other enhancements.

Now in order to find the extensions you can, either type “Ctrl+Shift+X” then it will be opened and you can also once click on the Extensions icon tab,



I get directed to the applications that I have installed. These are the few which are needed for future and current programming. For the language support I installed Python, JavaScript, Dart, Flutter etc.

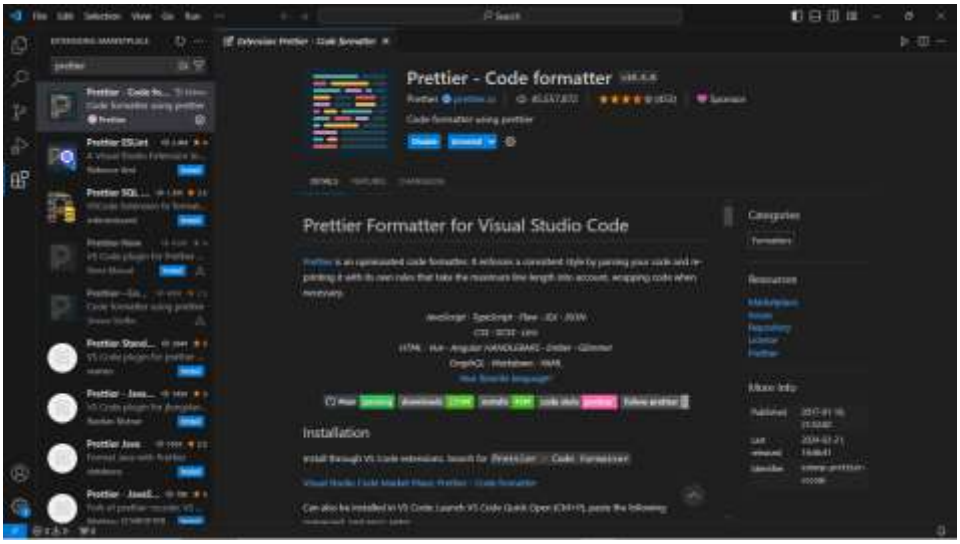
There are even versions such as GitHub etc.

To install extensions you can use the Command Palette with the following keyboard shortcut, “Ctrl + Shift + P” which you can type “Extensions Install Extensions” for you to install directly from the marketplace.

When managing extensions we can be able to disable and enable. By so, we can turn extensions on or off by means of the Extensions view. We can uninstall as well by deleting an add-on by clicking the icon next to it in the Extensions tab and choosing "Uninstall”. Another way of mongering the extensions by updating which you can check your updates.

Essential extensions for web development which are:

Prettier - Code formatter that automatically arranges code which are HTML, JavaScript, etc. to guarantee a uniform style.



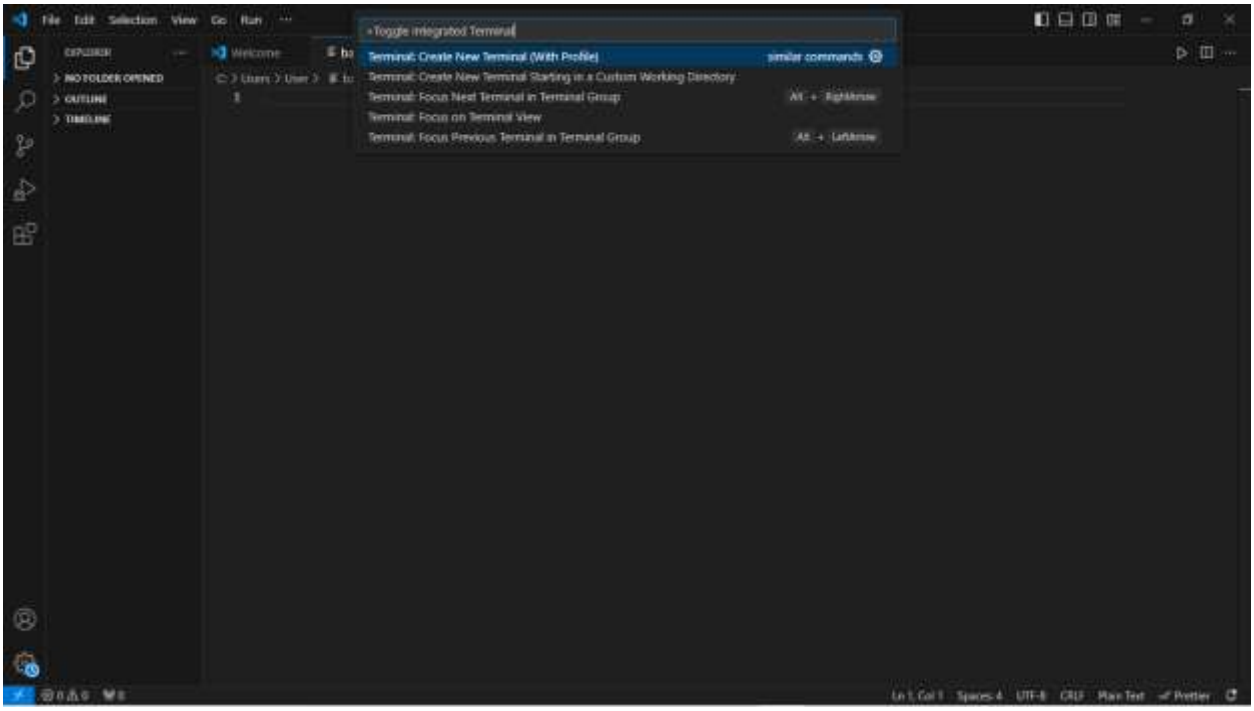
GitLens which develops Git integration by offering detailed understandings into, authorship, changes into the files and more within VS Code.

HTML CSS Support which improves HTML files with CSS support by enabling autocompleting for class names and IDs from linked CSS files.

Path Intellisense which provides autocomplete suggestions for file paths in your code.

Questions 6

We can open the integrated terminal in VS code by using the Command Palette. Of course there are many ways in which we can open it but this is the way I like better. By opening first the Command Palette I will need to use the shortcut key “Ctrl + Shift + P” then after I can type in “Toggle Integrated Terminal” then after I will click it from the list.



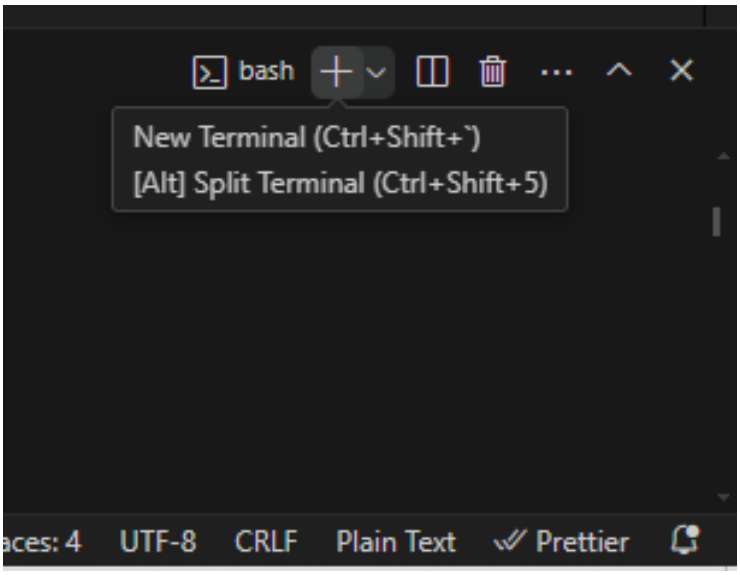
When using the terminal I can do the following:

By using many terminals, where I can click on the icon with a plus sign within the terminal.

I can use the terminal selector by swapping in between various terminals by means of the dropdown menu.

I can use basic commands running any shell commands.

I can split the terminals by using the slip terminal button, or I can use the keyboard shortcuts which is Ctrl + \



In regards to the advantages of using the integrated Terminal compared to an external Terminal which are:

Effectiveness, which it allows you to take or copy the error message from the terminal for debugging, and help with quick assess with using keyboard shortcuts.

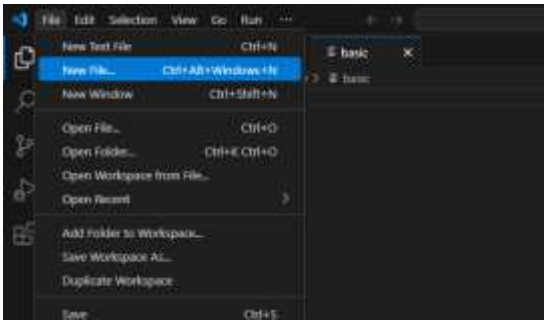
Suitability, by using single environment, so you can working without needing to swap between applications and windows. Also it assists on opening the context of the current workspace, therefore helping in managing path better and easier.

Next is better integration, which helps with having commands that are specific for projects.

They have better features to use these are your Slit view and additions with tasks and functions.

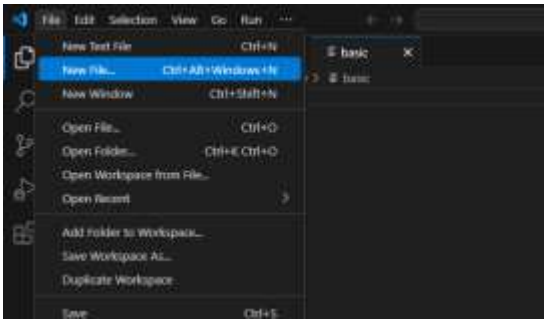
Questions 7

When creating files and folders, I can use the shortcut which is “Ctrl + N” or with another route I can go to file then click on ”New file”.



When creating a folder I can use the right click onto the Explorer pan and click on “New Folder”

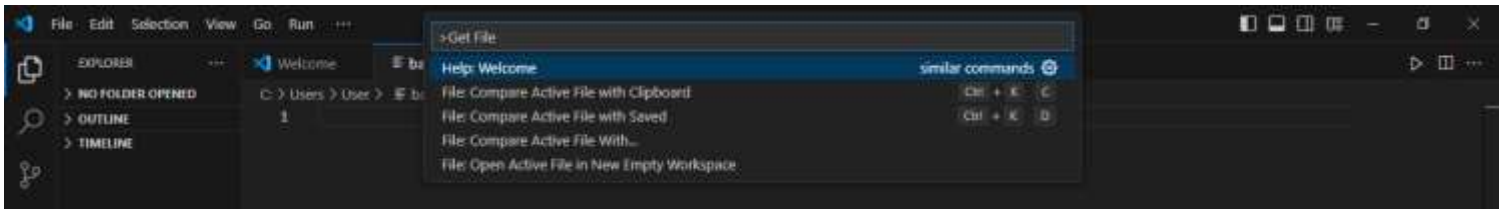
Now when opening a folder I can use the shortcut “Ctrl + K Ctrl +o” when opening a file I can use the command “Ctrl +o” or head to File then click “Open File”.



When it comes to managing files and folders, here are many other ways:

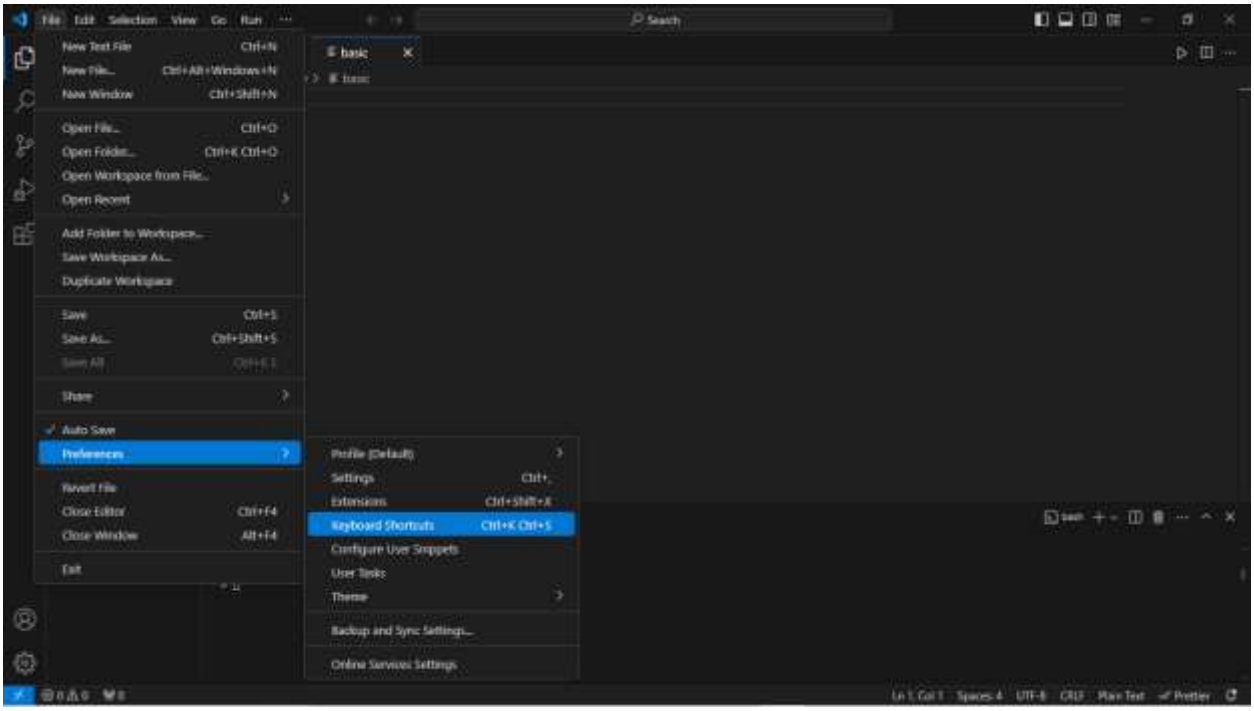
To move them I can drag or take the folder or the file from one place which is in the Explorer pane and drop it to another place or location. When wanting to rename them you can right click onto the folder or file then click “Rename”. Also when deleting I can select the chosen file or folder then I can choose “delete” or right click and choose “Delete”.

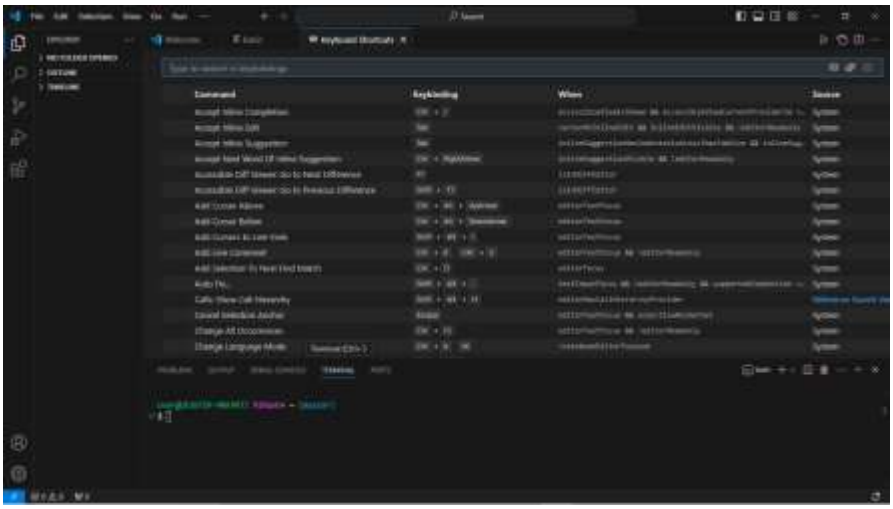
When navigating in between directories, for me to go to a file, in the Command Palette I can type and go to “Go to File” then I can type the file name and choose.



When wanting to open, I can use the keyboard command which is “Ctrl + P”.

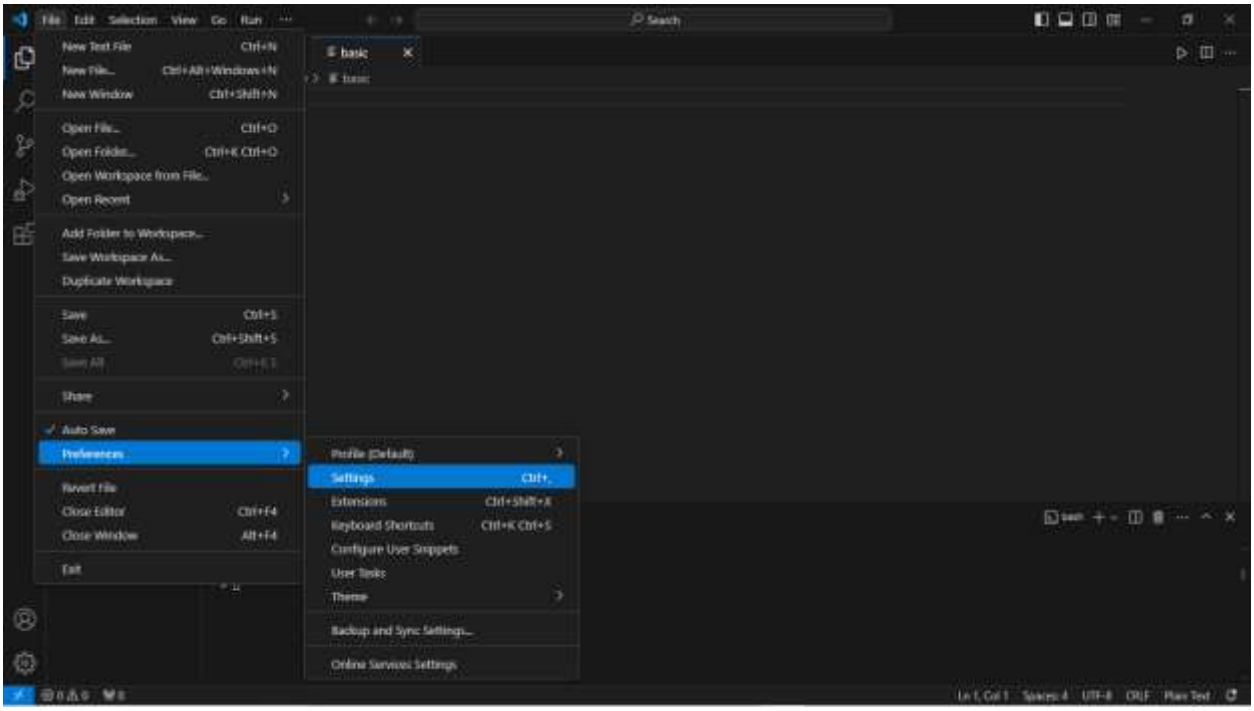
To get familiar or know some keyboard shortcuts I can use the command “Ctrl + K Ctrl + S” then it will direct me to the keyboard where I can learn on the shortcuts that are used in the applications.

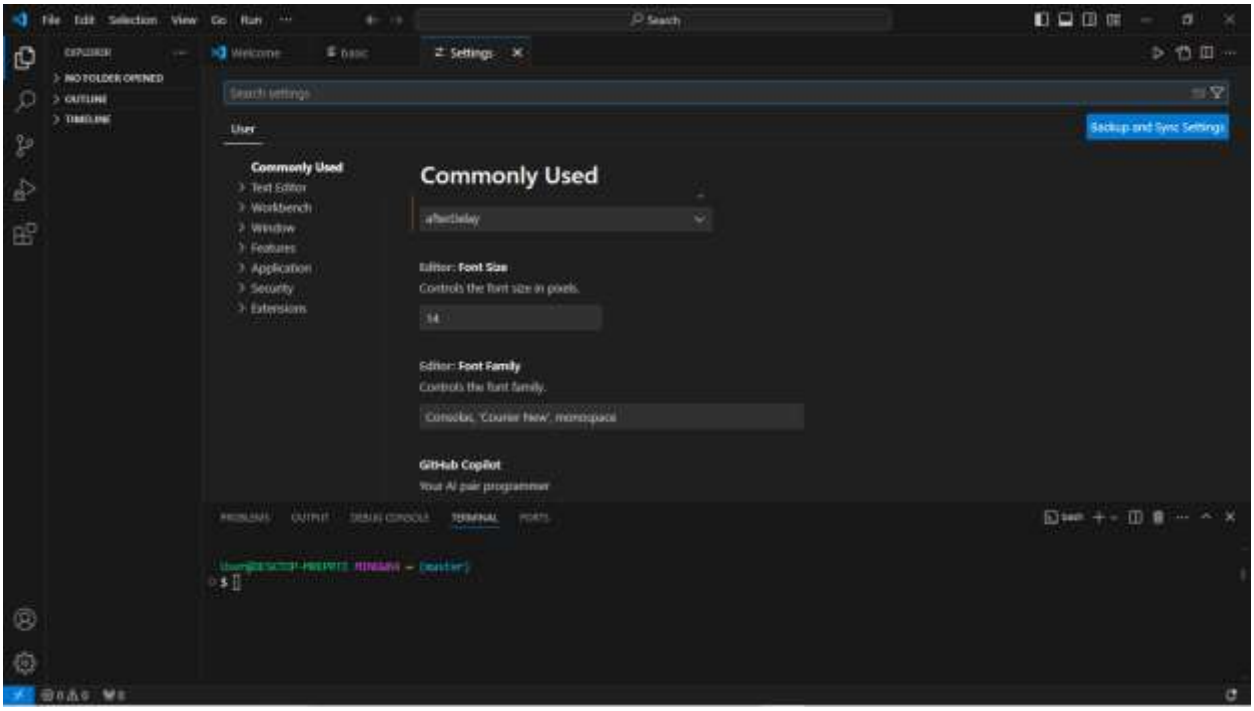




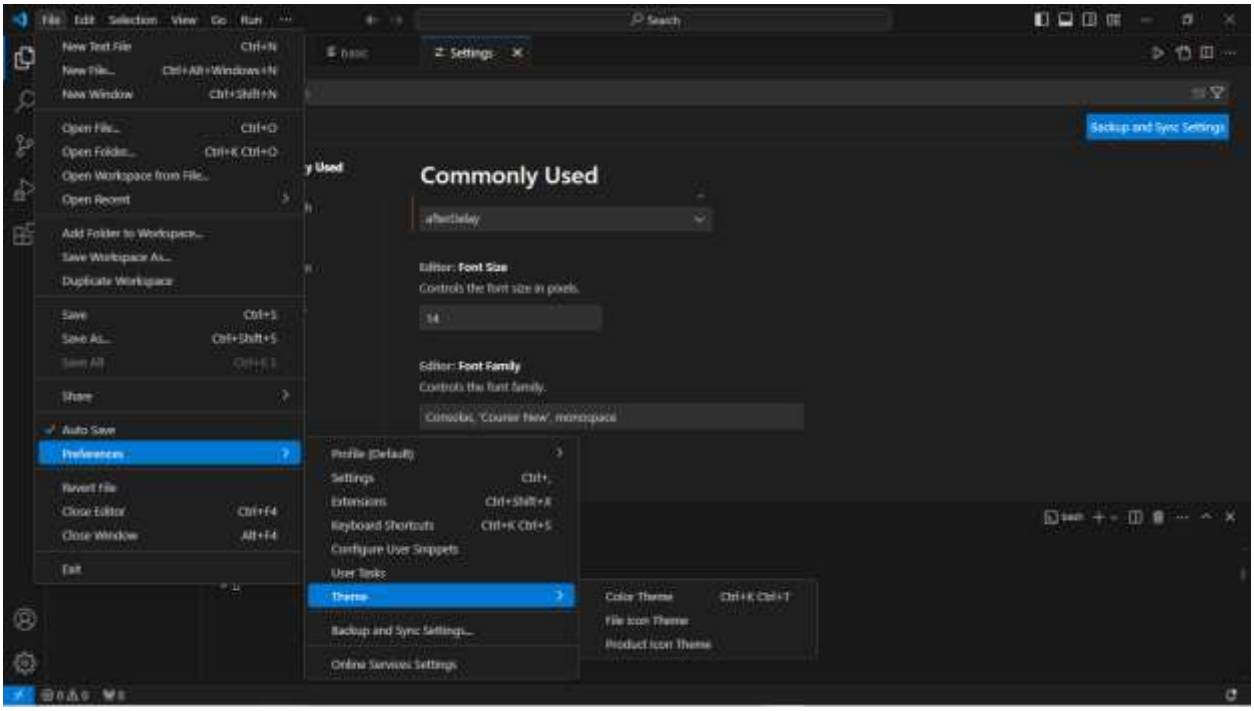
Questions 8

For me to access settings I can go to the Command Palette, then I search for “Preferences: Open settings” then choose it.





For me to change the theme I can use the Command Palette and type in “Preferences: Color Theme” choose it then after I can select any theme I like. Or go to File, then Preferences and click theme.



When changing the font size I use it through the Settings UI, which is the user interface then within the search bar I will type ‘font size’ then after choose the “Editor: Font Size” and I can make the necessary changes that I need.

For me to change my key bindings, I can go to the Command Palette where I’ll type out ‘Preferences: Open Keyboard Shortcuts (JSON)’ then I can start to place the entries which are “keybindings.json’ then I can do what I need to do.

Questions 9

Firstly, I'll need to install my VScode, then after install all my extensions such as java, python, prettier etc, after I'll open a project via a folder then after generate a source code for example for python I'll use py. Then I'll start my coding journey. When debugging I'll need to create a debug configuration where I can go to run and debug icon which is located in the activity bar, then I click on the create a launch.json file to open the fil which is launch.json after choose the right environment I'm using.

Then after I the launch.json file is finally created which is in the .vscode directory with its settings that are default and I can do as I please.

To debug I can use the keyboard shortcut "F5" then the program will make an execution and stop at any breakpoints that I have made.

Here are some of the key debugging features:

Integrated Terminal, a Debug Console, Breakpoints, Variable Inspection, controls such as Step Over, Step Into, Step Out.

Questions 10

Using Vscode to handle version control is easy and improves your workflow, enabling you to directly manage your Git repositories from the editor.

When Initializing a Repository, I'll start by opening my project folder, then after I'll then click onto the "Initialize Repository" button which is located within the Source Control view.

Thereafter a new Git repository in my root directory in my project is now created. When making or changing commits after making the changes you made us the repository, I can start by entering a commit message within the text box that is located by the top of the Source Control view.

After I can click the tick and then there'll be changes to my commit.

When pushing changes to my Github I'll start by pushing my local commits to the GitHub repository and I ca use the following command "git push –u origin master" them it will be pushed.

Citations

- Visual Studio Code User Interface (2021). https://code.visualstudio.com/docs/getstarted/userinterface.

- Using Git with VS Code (2022). https://www.gitkraken.com/blog/vs-code-git .

- Debugging in Visual studio code (2021). https://code.visualstudio.com/docs/editor/debugging .

- Mikejo (2023) Debugging code for absolute beginners - Visual Studio (Windows). https://learn.microsoft.com/en-us/visualstudio/debugger/debugging-absolute-beginners?view=vs-2022 .

- Visual Studio Code User Interface (2021b). https://code.visualstudio.com/docs/getstarted/userinterface#:~:text=The%20Command%20Palette%20provides%20access,symbol%20by%20typing%20its%20name .