QUESTION 1

In Downloading Visual Studio Code, there some prerequisite to notice in other for the down to happen

- **Internet Connection:** This is essential since download will be done over the internet.You need an active internet connection to download the installer.
- **Administrator Privileges**: You may need administrator rights to install software on your PC.

Steps to Install Visual Studio Code

- Open your web browser
- Go to the official Visual Studio Code website: https://code.visualstudio.com/
- Click on the "Download for Windows" button. This should detect your operating system and provide the appropriate installer.
- Once the download completes, locate the downloaded installer file (typically in your Downloads folder).
- Double-click the installer file (VSCodeSetup-x64-<version>.exe) to start the installation process.

Install Visual Studio Code:

- The installer will launch a setup wizard. Click "Next" to proceed.
- Review the License Agreement and click "I accept the agreement" if you agree to the terms.
- Choose the destination folder where you want to install VS Code or leave the default and click "Next".
- Select any additional tasks such as creating shortcuts or adding to the PATH (recommended) and click "Next".
- Finally, click "Install" to begin the installation process.

Complete the Installation:

- Wait for the installer to finish installing Visual Studio Code on your computer. This typically takes a few moments.

Launch Visual Studio Code:

- Once the installation completes, you can choose to launch VS Code immediately by leaving the "Launch Visual Studio Code" checkbox checked.
- Click "Finish" to exit the installer and launch Visual Studio Code.

Configure Visual Studio Code (Optional):

Upon launching VS Code for the first time, you can customize your preferences and install extensions according to your needs.

QUESTION 2

For optimal coding environment on VS Code, there are important and optional setups that needs to be done depending on what is being worked on some are:

Theme and Color Theme:

- Open VS Code and go to `File` > `Preferences` > `Color Theme`.
- Choose a color theme that suits your preference (e.g., Dark+, Light+, Solarized Light, etc.).

Extensions:

- Extensions enhance VS Code with additional features and language support.
- Some essential extensions to consider:

-Language Support: Install extensions for the programming languages you use (e.g., Python, JavaScript, Java).

- Git Integration: Install extensions like GitLens for enhanced Git functionalities.
- Debugger: Install extensions for debugging support (e.g., Debugger for Chrome).
- IntelliSense/Auto-completion: Extensions like IntelliSense for code completion.
- Formatting: Extensions like Prettier for code formatting.

Font and Font Size:

- Go to `File` > `Preferences` > `Settings`.
- Search for "font family" and "font size".

- Set your preferred font family (e.g., "Consolas", "Menlo", "monospace") and adjust the font size.

Indentation and Tab Size:

- In the same `Settings` panel, search for "tab size" and set it to your preferred value (e.g., 2 or 4).
- Consider setting "Editor: Insert Spaces" to `true` if you prefer spaces over tabs for indentation.

Auto Save Preferences: This is very essential since you don't want to loose your work most of the time. When you set it up it helps with saving while working on your project

- Determine how often you want VS Code to save your files automatically.
- Go to `File` > `Preferences` > `Settings` and search for "files.autoSave".
- Choose from options like "onWindowChange", "afterDelay", or "onWindowChange".

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Version Control Integration:- If you're using Git or other version control systems, configure your preferred settings under `File` > `Preferences` > `Settings`.

Integrated Terminal Preferences:

- Customize settings for the integrated terminal (`File` > `Preferences` > `Settings` and search for "terminal").
- Adjust shell paths, default shell, font size, etc., according to your preference.

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QUESTION 3

- **Activity Bar**: Located on the side, it houses icons for different activities like Explorer (file navigation), Search, Source Control (Git), and Extensions. It provides quick access to essential tools.
- **Side Bar**: Adjacent to the Activity Bar, it contains views such as Explorer (file browser), Search, Git, and Extensions. It allows navigation through files, folders, and project-related tools.
- **Editor Group**: The main area where files are opened for editing. Multiple tabs can be opened within Editor Groups, facilitating multitasking and easy switching between files.
- **Status Bar**: Positioned at the bottom, it displays information such as the language mode, line endings, indentation, and Git status. It also includes a search bar and notifications for extensions and settings.

QUESTION 4

The Command Palette in VS Code is a powerful tool accessed with the short cut Ctrl+Shift+P on Windows. It allows users to execute commands, search for settings, and install extensions directly. Common tasks include running Git commands (Git: Commit, Git: Pull), changing the color theme (Preferences: Color Theme), and formatting code (Format Document).

QUESTION 5

Extensions can be found on the Activity Bar on the VS code, that's the left side of the VS Code. VS Code extensions add languages debuggers and tools to your installation to support your development work flow. Some web development extensions are; Prettier - Code formatter,Live ServerPath,Auto Rename Tag,CSS Peek,HTML CSS Support,REST Client.

QUESTION 6

To open the integrated terminal in VS Code, use the shortcut Ctrl+ (backtick) or navigate to View > Terminal. It appears at the bottom of the editor. You can execute commands directly within VS Code, like running scripts or Git commands, and switch between terminal instances. Advantages include seamless integration with the editor (e.g., accessing files, navigating projects), quicker context switching between coding and terminal tasks, and easier customization of fonts, colors, and settings without leaving the editor interface.

QUESTION 7

Creating Files and Folders: To create a new file, go to File ;New File or use the shortcut Ctrl+N on Windows. Name the file and press Enter.To create a new folder/directory, right-click in the Explorer (left sidebar), select New Folder, and name it. You can also create a directory or file on any place you want on your PC eg; Desktop and access it from VS code by selecting folder when you tab on the 'open folder' on the option in VS code.

· **Opening Files and Folders**: Double-click on a file in the Explorer to open it in the editor.To open a folder, go to File, Open Folder... and select the folder you want to open.

· **Managing Files and Folders**: Right-click on a file or folder in the Explorer to rename, delete, or copy it.Use drag-and-drop to move files or folders within the Explorer.

· **Navigating Efficiently**:Use the Explorer (left sidebar) to navigate between files and folders.Use Ctrl+Tab (Windows/Linux) to switch between open files.Use Ctrl+P Windows to quickly search for and open files by name.

QUESTION 8

To open the Settings editor, navigate to File > Preferences > Settings. Alternately, open the Settings editor from the Command Palette Ctrl+Shift+P with Preferences: Open Settings or use the keyboard shortcut Ctrl+

To select a Color Theme:

- Select the File > Preferences > Theme > Color Theme menu item, or use the Preferences: Color Theme command (Ctrl+T+Ctrl+P) to display the Color Theme picker.
- Use the Up and Down keys to navigate through the list and preview the colors of the theme.
- Select the theme you want and press Enter The active color theme is stored in your use settings (keyboard shortcut Ctrl+).

To change the keybinding;

You can open this editor by going to the menu under File > Preferences > Keyboard Shortcuts or by using the Preferences: Open Keyboard Shortcuts command CTRL+K+CTRL+S

To Change Font Size in VS Code;

Open settings**,** Press Ctrl+, (comma) on Windows to open the Settings.

·Search for Font Settings: In the search bar at the top of the Settings, type "font size".

Adjust Font Size: Locate the setting named Editor: Font Size.Use the dropdown menu or input box to select or type your preferred font size (e.g., 14 for 14px).

Save Changes: After adjusting the font size, VS Code automatically applies the changes. You can close the Settings tab.

QUESTION 9:

DEBUGGING IN VS CODE:

- To bring up the Run and Debug view, select the Run and Debug icon in the Activity Bar on the side of VS Code. You can also use the keyboard shortcut CTRL+SHIFT+D
- The Run and Debug view displays all information related to running and debugging and has a top bar with debugging commands and configuration settings.
- If running and debugging is not yet configured VS Code shows the Run start view.
- The top-level Run menu has the most common run and debug commands: To run or debug a simple app in VS Code, select Run and Debug on the Debug start view or press F5 and VS Code will try to run your currently active file.

Visual Studio Code offers key debugging features such as breakpoints for pausing code execution, variable inspection for examining values during runtime, call stack navigation to trace function calls, and integrated support for debugging various languages including JavaScript, Python, and C#.

QUESTION 10:

Initializing a Repository:

- Open VS Code and navigate to the folder or create a new folder where you want to initialize the Git repository.
- Open the integrated terminal (Ctrl+``) and use Git commands like git init` to initialize a new Git repository.

Making Commits:

- Once files are added or modified, open the Source Control view (Ctrl+Shift+G), stage changes by clicking the + next to files, then enter a commit message in the textbox at the top of the view and press Ctrl+Enter to commit.

· **Pushing Changes to GitHub:**

- Link your local repository to a GitHub repository by adding a remote (git remote add origin <repository-url>).
- Push commits to GitHub using git push -u origin master (replace master with your branch name if different).

SOURCE:

- CHATGPT
- https://code.visualstudio.com/docs

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