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**OST LAB 4  
BATCH-C**

# OST LAB 4

**AIM:-** Development Environments Introduction to Integrated Development Environments (IDEs) and Text Editors, Using VSCode, Atom, and Sublime Text, Customizing development environments.

## **THEORY:-**

**Q1] What is an Integrated Development Environment(IDE) ? Explain its purpose and key features.**

An Integrated Development Environment (IDE) is a comprehensive software application that provides tools and features to facilitate software development. It integrates various development tools into a single interface, allowing developers to write, test, debug, and manage their code more efficiently. Here's an overview of its purpose and key features:

### **Purpose of an IDE**

1. **Streamline Development:** IDEs aim to simplify and speed up the development process by consolidating multiple tools into one environment. This reduces the need to switch between different applications and tools.
2. **Improve Productivity:** By providing a cohesive set of tools and features, IDEs help developers work more efficiently and effectively, which can lead to faster development cycles and higher-quality code.

3. **Enhance Collaboration:** Many IDEs offer features that support version control, collaboration, and team workflows, making it easier for developers to work together on the same project.

## **Key Features of an IDE**

1. **Code Editor:** A central component that provides syntax highlighting, code completion, and error detection. It helps developers write code more efficiently and with fewer mistakes.
2. **Compiler/Interpreter:** Integrated tools for compiling or interpreting code directly within the IDE. This feature allows for immediate feedback and testing of code changes.
3. **Debugger:** A tool for identifying and fixing bugs in code. It provides features like breakpoints, step-through execution, and variable inspection to help developers troubleshoot and debug their applications.
4. **Build Automation:** Integrated tools for automating the build process, including compiling code, running tests, and packaging applications. This feature helps streamline the development workflow.
5. **Version Control Integration:** Support for version control systems like Git or SVN, allowing developers to manage code changes, collaborate with others, and track the history of their projects.
6. **Project Management:** Features for organizing and managing project files, dependencies, and configurations. This helps developers keep their projects structured and maintainable.

**Q2] How do text editors differ from IDE's? Provide examples of when you might choose one over the other.**

Feature	Text Editor	Integrated Development Environment (IDE)
Purpose	Basic text editing	Comprehensive software development
Primary Function	Editing and viewing text	Writing, testing, debugging, and managing code
Syntax Highlighting	Often supports basic syntax highlighting	Advanced syntax highlighting with language-specific support
Code Completion	Limited or absent	Advanced code completion and suggestions
Debugging Tools	Typically absent	Integrated debugger with breakpoints, step-through, and variable inspection
Build Automation	Usually absent	Integrated tools for compiling, building, and running code

## Choosing a Text Editor

### 1. Simple Scripting or Configuration Files

- **Example:** Editing a simple Python script, HTML, CSS, or configuration files.
- **Reason:** For straightforward text editing tasks with minimal code complexity, a text editor like **Notepad++**, **Sublime Text**, or **Visual Studio Code** provides a lightweight, fast, and distraction-free environment.

### 2. Quick Edits or Lightweight Projects

- **Example:** Making quick edits to small code snippets or working on lightweight scripts.
- **Reason:** Text editors are less resource-intensive and can be more responsive for quick edits and simple projects.

## Choosing an IDE

### 1. Complex Application Development

- **Example:** Developing a large-scale web application, enterprise software, or a complex system.
- **Reason:** IDEs like **IntelliJ IDEA**, **Visual Studio**, or **Eclipse** provide comprehensive tools for managing large codebases, including advanced debugging, code refactoring, and project management features.

### 2. Integrated Testing and Debugging

- **Example:** Working on a project that requires frequent debugging and testing, such as a game or a critical application.
- **Reason:** IDEs offer integrated debugging tools, test runners, and profiling capabilities that are essential for diagnosing and fixing issues in complex projects.

### **Q3] What are the advantages and disadvantages of using light weight text editor like sublime text compared to more feature rich ide like vs code?**

Choosing between a lightweight text editor like Sublime Text and a feature-rich IDE like Visual Studio Code (VS Code) depends on various factors, including the complexity of the project, the developer's needs, and personal preferences. Here are the advantages and disadvantages of each:

#### **Sublime Text (Lightweight Text Editor)**

##### **Advantages:**

##### **1. Performance and Speed:**

- **Fast and Responsive:** Sublime Text is known for its speed and responsiveness, even with large files or many open files.
- **Low Resource Usage:** It consumes fewer system resources compared to more feature-rich IDEs, making it ideal for older or less powerful machines.

##### **2. Simplicity and Focus:**

- **Minimalist Interface:** The interface is clean and distraction-free, which can help developers focus on coding without being overwhelmed by features.
- **Quick Startup:** Sublime Text starts up quickly, which is useful for making rapid edits or reviewing code snippets.

##### **3. Customization and Flexibility:**

- **Highly Customizable:** Users can tailor Sublime Text through extensive customization options and packages.

It supports various plugins and themes to enhance functionality and appearance.

- **Cross-Platform:** Available on Windows, macOS, and Linux, allowing for a consistent experience across different operating systems.

## **Disadvantages:**

### **1. Limited Built-In Features:**

- **Basic Functionality:** Sublime Text lacks advanced integrated features such as built-in debugging, advanced code analysis, or integrated testing tools.
- **Manual Integration:** Many features require additional plugins or manual setup, which can be time-consuming and may not always integrate seamlessly.

### **2. Learning Curve for Extensions:**

- **Plugin Dependency:** Users may need to rely heavily on third-party plugins to achieve functionality that is built into more feature-rich IDEs, and managing these plugins can become cumbersome.

### **3. No Built-In Version Control:**

- **Version Control Integration:** Unlike some IDEs, Sublime Text does not have built-in version control integration, so users need to rely on external tools or plugins.

## Q4] Explain the steps involved in installing V.S.Code on linux debian system.

### 1. Update the Package Index

```
sudo apt update
```

### 2. Install Required Dependencies

```
sudo apt install wget gpg
```

### 3. Download the VS Code .deb Package

```
wget https://go.microsoft.com/fwlink/?LinkID=760868 -O vscode.deb
```

### 4. Install the .deb Package

```
sudo dpkg -i vscode.deb
```

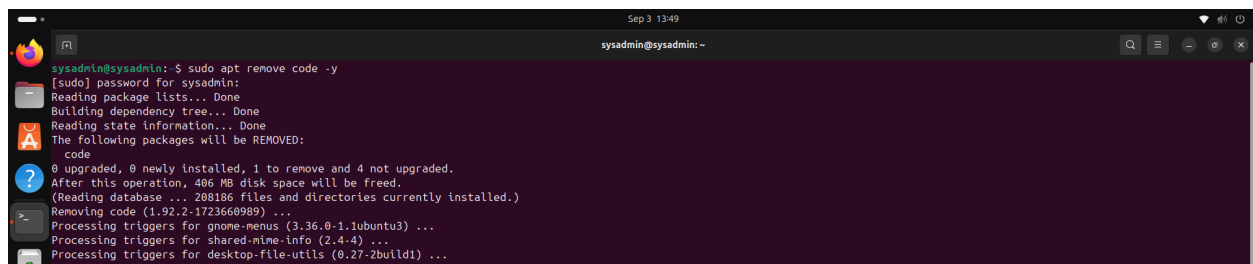
### 5. Resolve Any Missing Dependencies

```
sudo apt-get install -f
```

### 6. Launch Visual Studio Code

```
code
```

## SCREENSHOTS OF UNINSTALLING VSC



```
sysadmin@sysadmin:~$ sudo apt remove code -y
[sudo] password for sysadmin:
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following packages will be REMOVED:
  code
0 upgraded, 0 newly installed, 1 to remove and 4 not upgraded.
After this operation, 406 MB disk space will be freed.
(Reading database ... 208186 files and directories currently installed.)
Removing code (1.92.2-1723660989) ...
Processing triggers for gnome-menus (3.36.0-1ubuntu3) ...
Processing triggers for shared-mime-info (2.4.4) ...
Processing triggers for desktop-file-utils (0.27-2build1) ...
```



# SCREENSHOTS OF INSTALLING VSC

```
sysadmin@sysadmin:~$ sudo apt update
Get:1 https://packages.microsoft.com/repos/vscode stable InRelease [3,594 B]
Err:1 https://packages.microsoft.com/repos/vscode stable InRelease
The following signatures couldn't be verified because the public key is not available: NO_PUBKEY E3BE940BE1229CF
Hit:2 http://archive.ubuntu.com/ubuntu noble InRelease
Get:3 http://security.ubuntu.com/ubuntu noble-security InRelease [126 kB]
Get:4 http://archive.ubuntu.com/ubuntu noble-updates InRelease [126 kB]
Hit:5 https://download.sublimetext.com/apt/stable/ InRelease
Err:6 https://packagecloud.io/AtomEditor/atom/any/debian InRelease
402 Payment Required [IP: 54.219.193.67 443]
Ign:7 https://ppa.launchpadcontent.net/webupd8team/atom/ubuntu noble InRelease
Err:8 https://ppa.launchpadcontent.net/webupd8team/atom/ubuntu noble Release
404 Not Found [IP: 185.125.190.80 443]
Get:9 http://security.ubuntu.com/ubuntu noble-security/main amd64 Packages [324 kB]
Err:10 https://packagecloud.io/AtomEditor/atom/any/ubuntu InRelease
402 Payment Required [IP: 54.219.193.67 443]
Hit:11 http://archive.ubuntu.com/ubuntu noble-backports InRelease
Get:12 http://archive.ubuntu.com/ubuntu noble-updates/main amd64 Packages [470 kB]
Get:13 http://security.ubuntu.com/ubuntu noble-security/main Translation-en [73.6 kB]
Get:14 http://security.ubuntu.com/ubuntu noble-security/main amd64 c-n-f Metadata [4,276 B]
Get:15 http://archive.ubuntu.com/ubuntu noble-updates/main Translation-en [117 kB]
Get:16 http://security.ubuntu.com/ubuntu noble-security/universe amd64 Packages [263 kB]
Get:17 http://archive.ubuntu.com/ubuntu noble-security/universe Translation-en [119 kB]
Get:18 http://archive.ubuntu.com/ubuntu noble-updates/universe amd64 Packages [348 kB]
Get:19 http://archive.ubuntu.com/ubuntu noble-updates/universe Translation-en [143 kB]
Get:20 http://security.ubuntu.com/ubuntu noble-security/universe Translation-en [119 kB]
Get:21 http://archive.ubuntu.com/ubuntu noble-updates/universe amd64 c-n-f Metadata [13.8 kB]
Get:22 http://security.ubuntu.com/ubuntu noble-security/universe amd64 c-n-f Metadata [9,936 B]
Reading package lists... Done
W: https://download.sublimetext.com/apt/stable/InRelease: Key is stored in legacy trusted.gpg keyring (/etc/apt/trusted.gpg), see the DEPRECATION section in apt-key(8) for details.
E: An error occurred during the signature verification. The repository is not updated and the previous index files will be used. GPG error: https://packages.microsoft.com/repos/vscode stable InRelease: The following signatures couldn't be verified because the public key is not available: NO_PUBKEY E3BE940BE1229CF
E: Failed to fetch https://packagecloud.io/AtomEditor/atom/any/dists/debian/InRelease 402 Payment Required [IP: 54.219.193.67 443]
E: The repository 'https://packagecloud.io/AtomEditor/atom/any/debian InRelease' is not signed.
E: Updating from such a repository can't be done securely, and is therefore disabled by default.
E: See apt-secure(8) manpage for repository creation and user configuration details.
E: The repository 'https://ppa.launchpadcontent.net/webupd8team/atom/ubuntu noble Release' does not have a Release file.
E: Updating from such a repository can't be done securely, and is therefore disabled by default.
E: See apt-secure(8) manpage for repository creation and user configuration details.
E: Failed to fetch https://packagecloud.io/AtomEditor/atom/any/dists/ubuntu/InRelease 402 Payment Required [IP: 54.219.193.67 443]
E: The repository 'https://packagecloud.io/AtomEditor/atom/any/ubuntu InRelease' is not signed.
E: Updating from such a repository can't be done securely, and is therefore disabled by default.
```

```
sysadmin@sysadmin:~$ sudo apt install wget gpg
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
wget is already the newest version (1.21.4-1ubuntu4.1).
gpg is already the newest version (2.4.4-2ubuntu17).
0 upgraded, 0 newly installed, 0 to remove and 7 not upgraded.
sysadmin@sysadmin:~$ sudo apt-key add -
Warning: apt-key is deprecated. Manage keyring files in trusted.gpg.d instead (see apt-key(8)).
OK
sysadmin@sysadmin:~$ sudo sh -c 'echo "deb [arch=amd64] https://packages.microsoft.com/repos/vscode stable main" /etc/apt/sources.list.d/vscode.list'
sysadmin@sysadmin:~$ sudo apt update
Ign:1 https://packages.microsoft.com/repos/vscode stable InRelease
Hit:2 http://archive.ubuntu.com/ubuntu noble InRelease
Hit:3 http://security.ubuntu.com/ubuntu noble-security InRelease
Hit:4 http://archive.ubuntu.com/ubuntu noble-updates InRelease
Hit:5 http://archive.ubuntu.com/ubuntu noble-backports InRelease
Ign:6 https://ppa.launchpadcontent.net/webupd8team/atom/ubuntu noble InRelease
Err:7 https://ppa.launchpadcontent.net/webupd8team/atom/ubuntu noble Release
404 Not Found [IP: 185.125.190.80 443]
Hit:8 https://download.sublimetext.com/apt/stable/ InRelease
Ign:9 https://packages.microsoft.com/repos/vscode stable InRelease
Err:10 https://packagecloud.io/AtomEditor/atom/any/debian InRelease
402 Payment Required [IP: 52.52.69.196 443]
Ign:11 https://packages.microsoft.com/repos/vscode stable InRelease
Err:12 https://packagecloud.io/AtomEditor/atom/any/ubuntu InRelease
402 Payment Required [IP: 52.52.69.196 443]
Err:13 https://packages.microsoft.com/repos/vscode stable InRelease
bad header line and header data [IP: 13.187.246.48 443]
Reading package lists... Done
W: https://download.sublimetext.com/apt/stable/InRelease: Key is stored in legacy trusted.gpg keyring (/etc/apt/trusted.gpg), see the DEPRECATION section in apt-key(8) for details.
E: See apt-secure(8) manpage for repository creation and user configuration details.
E: Updating from such a repository can't be done securely, and is therefore disabled by default.
E: The repository 'https://ppa.launchpadcontent.net/webupd8team/atom/ubuntu noble Release' does not have a Release file.
E: Failed to fetch https://packagecloud.io/AtomEditor/atom/any/dists/debian/InRelease 402 Payment Required [IP: 52.52.69.196 443]
E: The repository 'https://packagecloud.io/AtomEditor/atom/any/debian InRelease' is not signed.
E: Updating from such a repository can't be done securely, and is therefore disabled by default.
E: See apt-secure(8) manpage for repository creation and user configuration details.
E: Failed to fetch https://packagecloud.io/AtomEditor/atom/any/dists/ubuntu/InRelease 402 Payment Required [IP: 52.52.69.196 443]
E: The repository 'https://packagecloud.io/AtomEditor/atom/any/ubuntu InRelease' is not signed.
E: Updating from such a repository can't be done securely, and is therefore disabled by default.
```

```
sysadmin@sysadmin:~$ sudo apt install code
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following NEW packages will be installed:
code
0 upgraded, 1 newly installed, 0 to remove and 7 not upgraded.
Need to get 183 MB of archives.
After this operation, 489 MB of additional disk space will be used.
Get:1 https://packages.microsoft.com/repos/vscode stable/main amd64 code amd64 1.92.2-172366989 [183 MB]
Fetched 183 MB in 18s (10.0 MB/s)
Selecting previously unselected package code.
(Reading database ... 286651 files and directories currently installed.)
Preparing to unpack .../code-1.92.2-172366989_amd64.deb ...
Unpacking code (1.92.2-172366989) ...
Setting up code (1.92.2-172366989) ...
Processing triggers for gnome-menus (3.36.0-1ubuntu1) ...
Processing triggers for shared-mime-info (2.4-4) ...
Processing triggers for desktop-file-utils (0.27-2build1) ...
sysadmin@sysadmin:~$
```

## **Q5] How can you customize the appearance of V.S.Code? Discuss the process of changing themes and adjusting the layout.**

Customizing the appearance of Visual Studio Code (VS Code) can significantly enhance your development experience by making the environment more comfortable and suited to your preferences. Here's how you can customize the appearance of VS Code, including changing themes and adjusting the layout:

### **Changing Themes**

Themes affect the overall color scheme of the editor, including the background, text colors, and syntax highlighting.

### **Using the Command Palette**

#### **1. Open the Command Palette:**

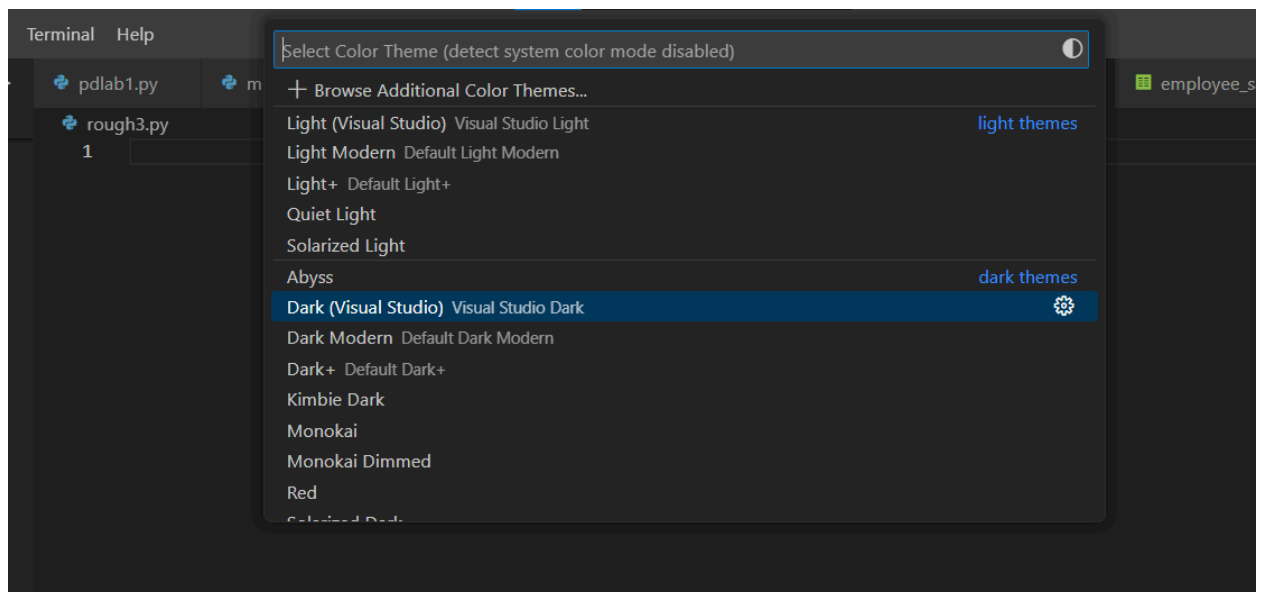
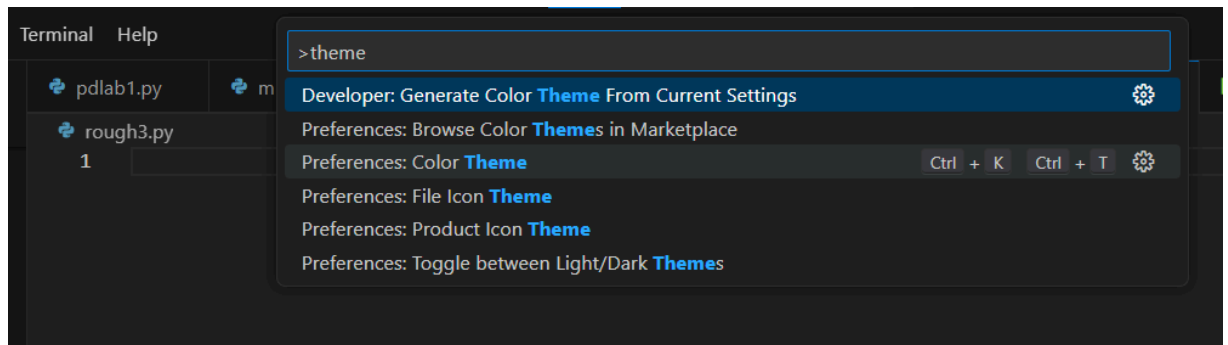
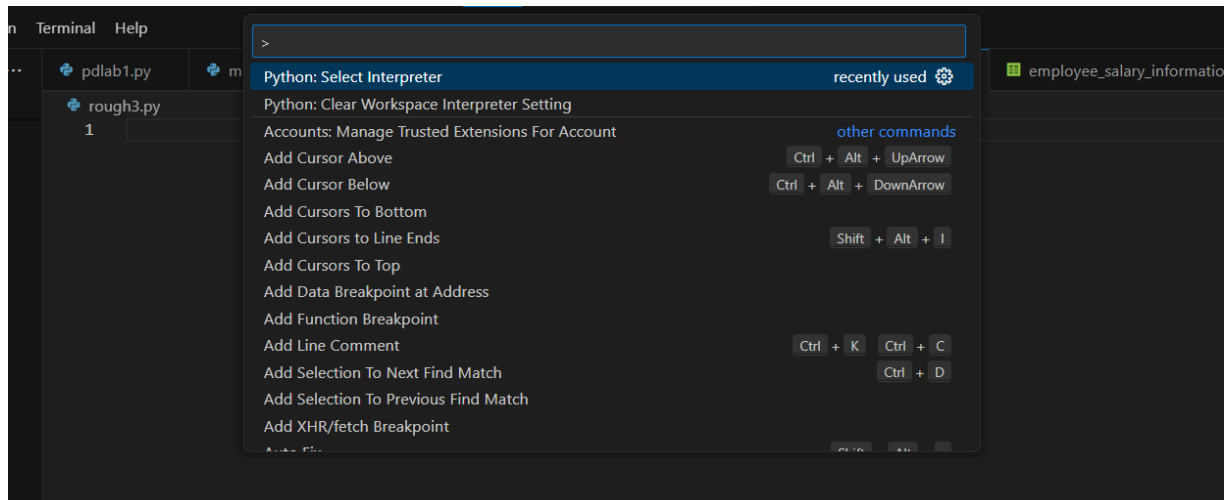
- Press **Ctrl+Shift+P** (or **Cmd+Shift+P** on macOS) to open the Command Palette.

#### **2. Search for Theme Commands:**

- Type **Color Theme** and select **Preferences: Color Theme** from the list.

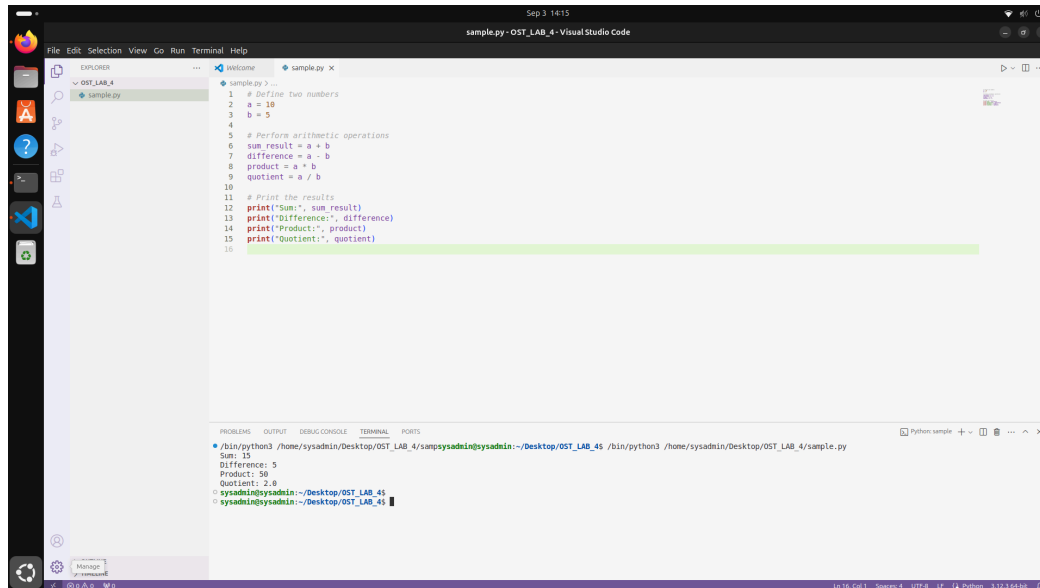
#### **3. Select a Theme:**

- Browse through the available themes and click on one to apply it. You will see a preview of the theme as you hover over it.

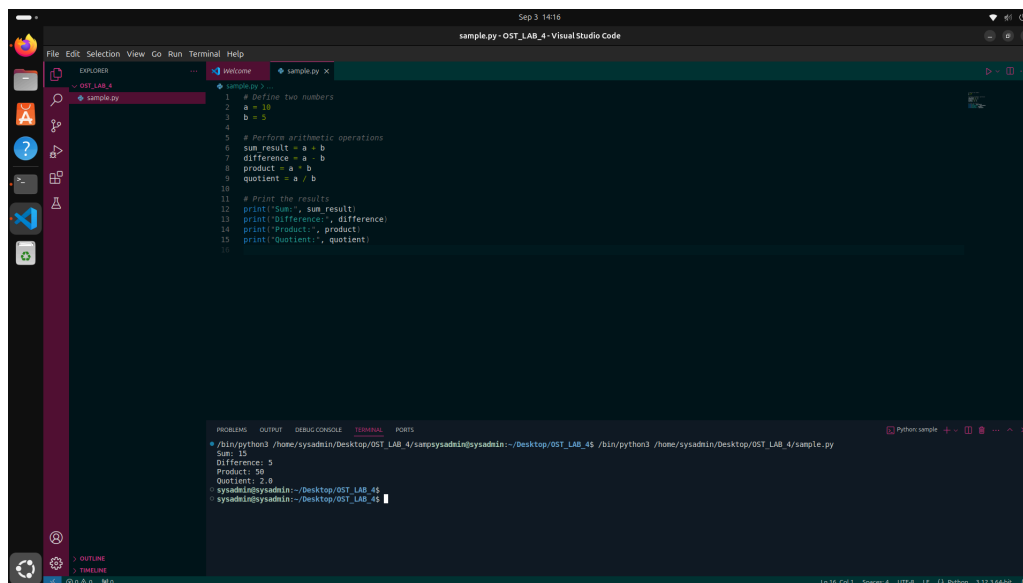


# THESE ARE SOME OF THE THEMES

## 1] LIGHT THEME



## 2] DARK SPACE THEME



**We can also install some extensions to change the layout of our V.S.Code**

## **1. Access the Extensions View**

### **1. Open the Extensions View:**

- Click on the Extensions icon in the Activity Bar on the side of the VS Code window. It looks like four squares forming a grid (usually on the left side of the window).
- Alternatively, you can open the Extensions view by pressing **Ctrl+Shift+X** on Windows/Linux or **Cmd+Shift+X** on macOS.

## **2. Search for Extensions**

### **1. Use the Search Box:**

- In the Extensions view, you'll see a search box at the top. Type keywords related to the extension you want to find. For example, if you're looking for Python support, you might type "Python".

### **2. Browse Featured Extensions:**

- You can also browse through the list of featured and recommended extensions displayed on the Extensions view page.

## **3. Install an Extension**

### **1. Select the Extension:**

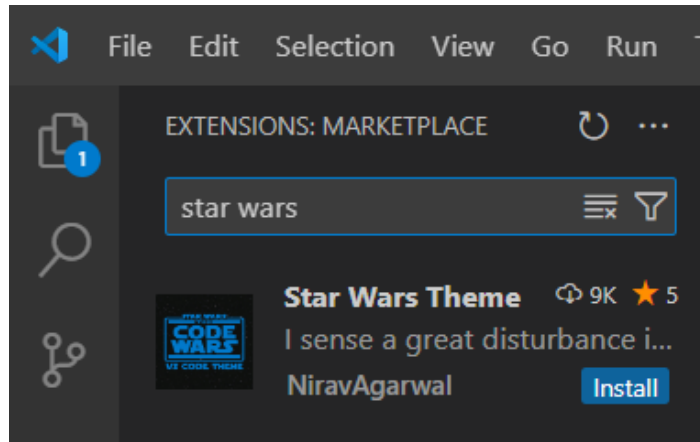
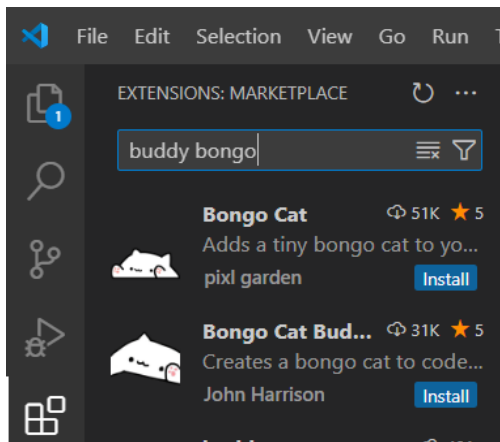
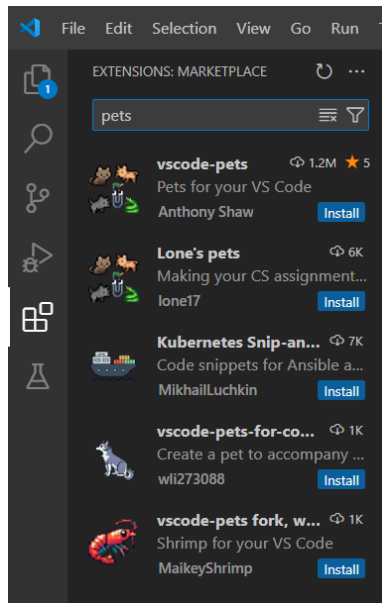
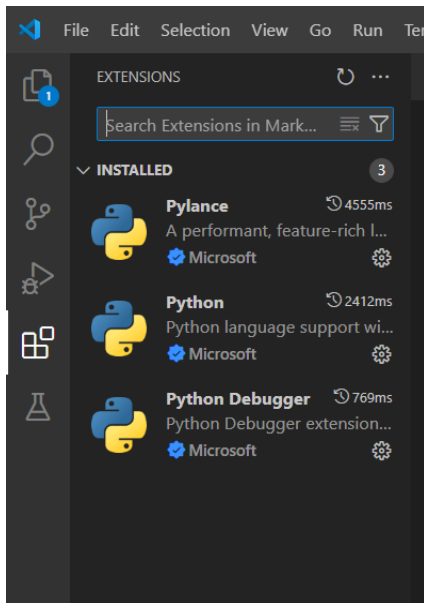
- Click on the extension you want to install from the search results. This will open the extension's details page.

### **2. Install the Extension:**

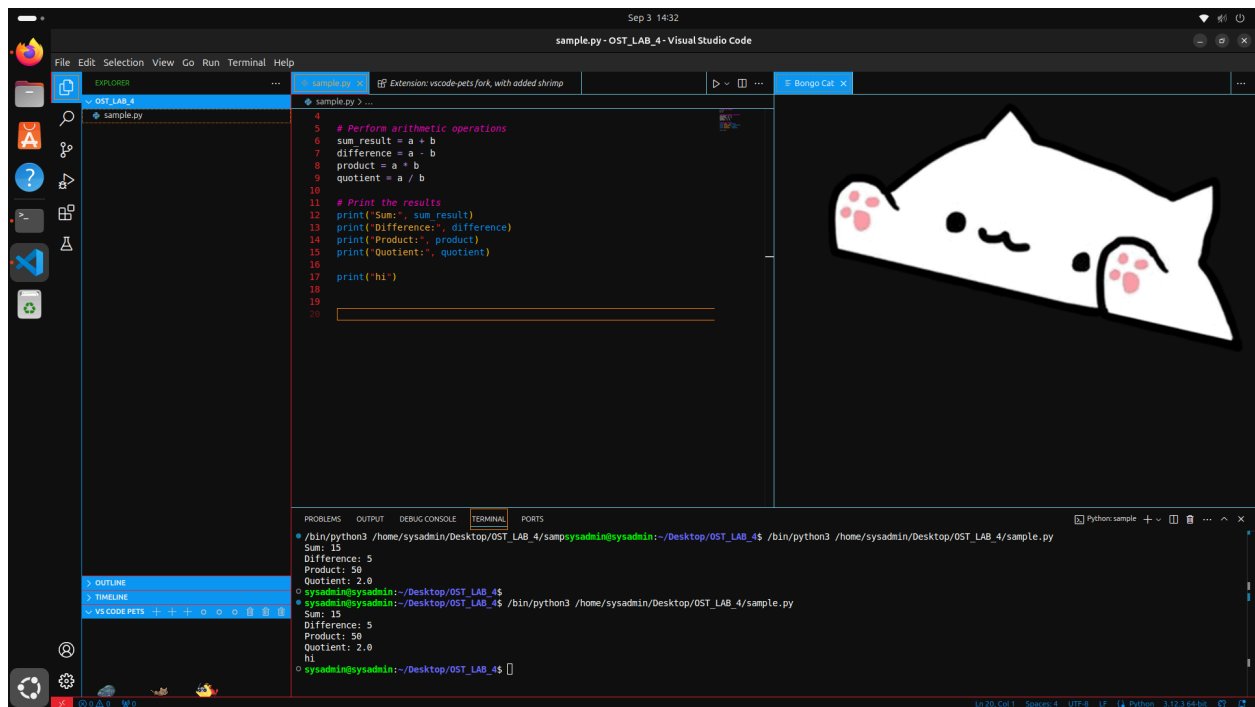
- On the extension's details page, click the **Install** button. The installation process will start, and you'll see a progress indicator.

### 3. Reload or Restart VS Code (if prompted):

- Some extensions require a reload or restart of VS Code to activate. If prompted, click the **Reload** button or restart VS Code manually.



## OUTPUT WITH THESE EXTENSIONS



The cat on the top right corner has appeared by activating the buddy bongo cat extension. The animals in the bottom left corner have appeared by activation of the pets theme. This whole theme has been set up by starwars theme extension.

## **Q6] Describe how to run a python script in vscode using the integrated terminal.**

To run a Python script in Visual Studio Code (VS Code) using the integrated terminal, start by opening VS Code and your Python script file. Navigate to the directory where your script is located by using the `cd` command in the terminal, which can be accessed by selecting `Terminal > New Terminal` from the top menu or by pressing `Ctrl+ (backtick) on Windows/Linux` or `Cmd+ (backtick)` on macOS. Once in the terminal, execute your script by typing `python script_name.py`, replacing `script_name.py` with the actual name of your script. If you have Python 3 installed and the default `python` command points to Python 2.x, use `python3` instead.

You can also run the script directly from the Command Palette by pressing `Ctrl+Shift+P` (or `Cmd+Shift+P` on macOS), typing `Python: Run Python File in Terminal`, and selecting it. Ensure that the correct Python interpreter is selected by clicking on the Python version in the bottom-left corner of the VS Code status bar or using the Command Palette to search for `Python: Select Interpreter`. If you're using a virtual environment, activate it in the terminal before running your script. The output of your script will appear in the integrated terminal, allowing you to view results, errors, and print statements. For debugging, you can set breakpoints and start debugging from `Run > Start Debugging` or by pressing `F5`. By following these steps, you can efficiently run and manage your Python scripts within VS Code's integrated terminal, enhancing your development workflow.



```
a = 10

b = 5


addition = a + b

subtraction = a - b

multiplication = a * b

division = a / b


print(f"Addition (a + b): {addition}")

print(f"Subtraction (a - b): {subtraction}")

print(f"Multiplication (a * b): {multiplication}")

print(f"Division (a / b): {division}")
```

OUTPUT OF THE ABOVE CODE IS ON PAGE 15

**Q7] Why might a developer prefer using a text editor over an IDE for certain tasks. Provide specific scenarios where this might be the case.**

Developers might prefer using a text editor over an Integrated Development Environment (IDE) for several reasons, depending on the specific requirements of their task and their working environment. Here are some scenarios where a text editor might be preferred:

**1. Simplicity and Speed:**

- **Scenario:** When working on simple scripts or configuration files that don't require advanced features.
- **Example:** Editing a quick shell script or a configuration file (like `.env` or `config.json`) where the developer just needs a lightweight tool for quick edits.

**2. Resource Constraints:**

- **Scenario:** When working on a machine with limited resources (e.g., low memory or slow processor).
- **Example:** On older or lower-spec machines, a text editor like Sublime Text or Notepad++ may run faster and use fewer resources compared to a full-featured IDE like VS Code or IntelliJ IDEA.

## **Q8] Explain how version control systems like git can be integrated into V.S.Code . What are the benefits of such integration?**

Integrating version control systems like Git into Visual Studio Code (VS Code) provides a seamless and efficient way to manage your codebase directly within the editor. Here's how Git integration works in VS Code and the benefits it offers:

### **Integration of Git in VS Code**

#### **1. Built-In Git Support:**

- **Automatic Detection:** VS Code has built-in Git support. When you open a folder that contains a Git repository, VS Code automatically detects it and activates Git features.
- **Source Control View:** You can access Git functionalities from the Source Control view, which you can open by clicking on the Source Control icon (a branch icon) in the Activity Bar on the side of the window.

#### **2. Basic Operations:**

- **Commit Changes:** Stage and commit changes using the Source Control view. You can enter commit messages and commit directly from this panel.
- **View Changes:** VS Code provides a visual interface for viewing changes to files. You can see diffs, stage specific changes, and discard changes if needed.
- **Branch Management:** Create, switch, and manage branches from the Source Control view. You can also perform operations like merging and rebasing.

### 3. Git Commands and Extensions:

- **Command Palette:** Access various Git commands using the Command Palette (**Ctrl+Shift+P** or **Cmd+Shift+P** on macOS) and search for commands like **Git: Pull**, **Git: Push**, or **Git: Fetch**.
- **Extensions:** Enhance Git functionality with extensions available in the VS Code marketplace. Extensions like **GitLens** provide advanced features like Git blame annotations, repository insights, and more detailed history.

## SCREENSHOTS OF UNINSTALLING AND INSTALLING SUBLIME TEXT.

### 1) UNINSTALL

```
sysadmin@sysadmin:~$ sudo apt remove sublime-text -y
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following packages will be REMOVED:
  sublime-text
0 upgraded, 0 newly installed, 1 to remove and 4 not upgraded.
After this operation, 50.9 MB disk space will be freed.
(Reading database ... 206751 files and directories currently installed.)
Removing sublime-text (4180) ...
Processing triggers for hicolor-icon-theme (0.17-2) ...
Processing triggers for gnome-menus (3.36.0-1ubuntu3) ...
Processing triggers for desktop-file-utils (0.27-2build1) ...
sysadmin@sysadmin:~$ sudo apt autoremove sublime-text -y
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
Package 'sublime-text' is not installed, so not removed
0 upgraded, 0 newly installed, 0 to remove and 4 not upgraded.
sysadmin@sysadmin:~$
```

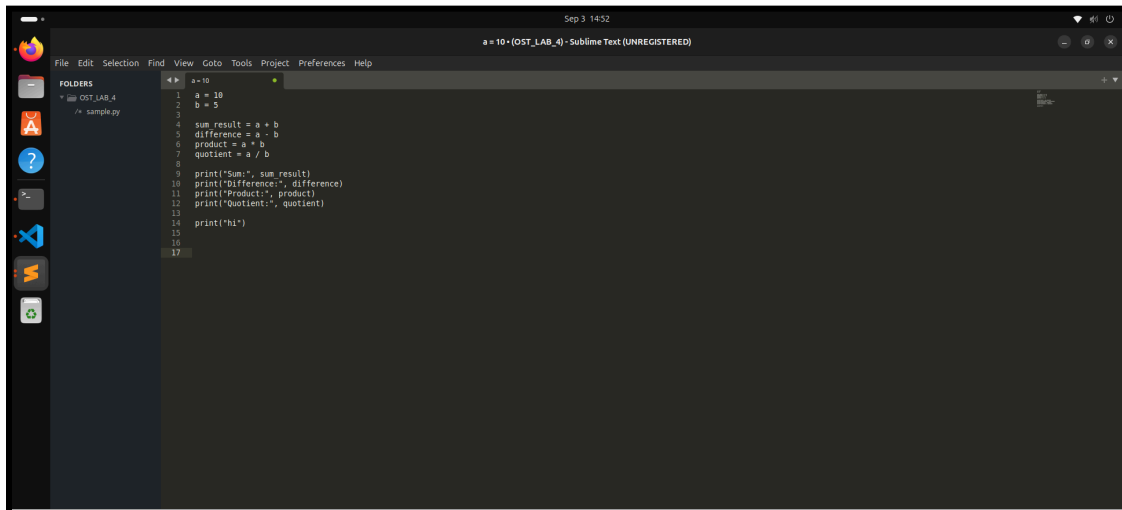
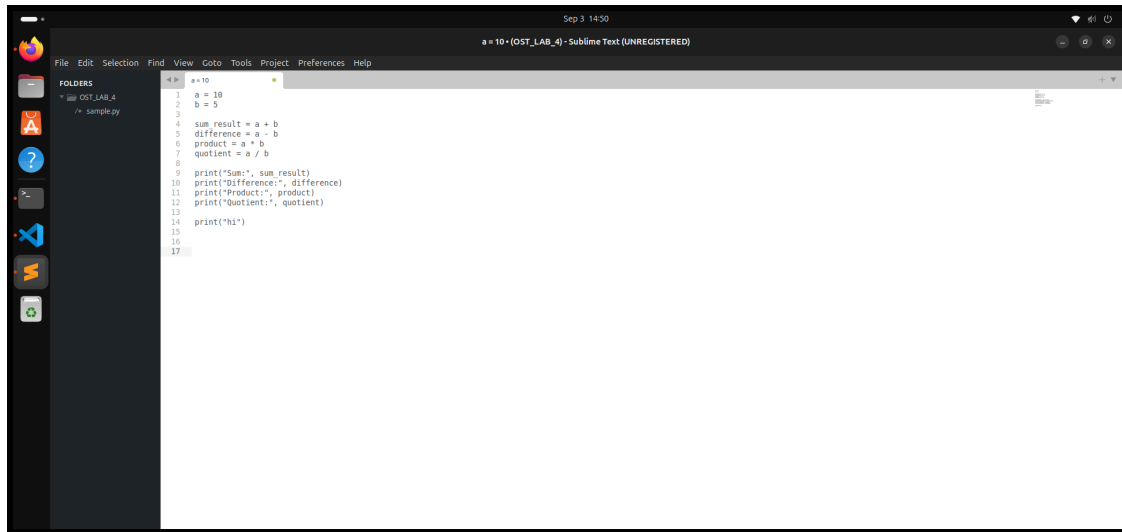
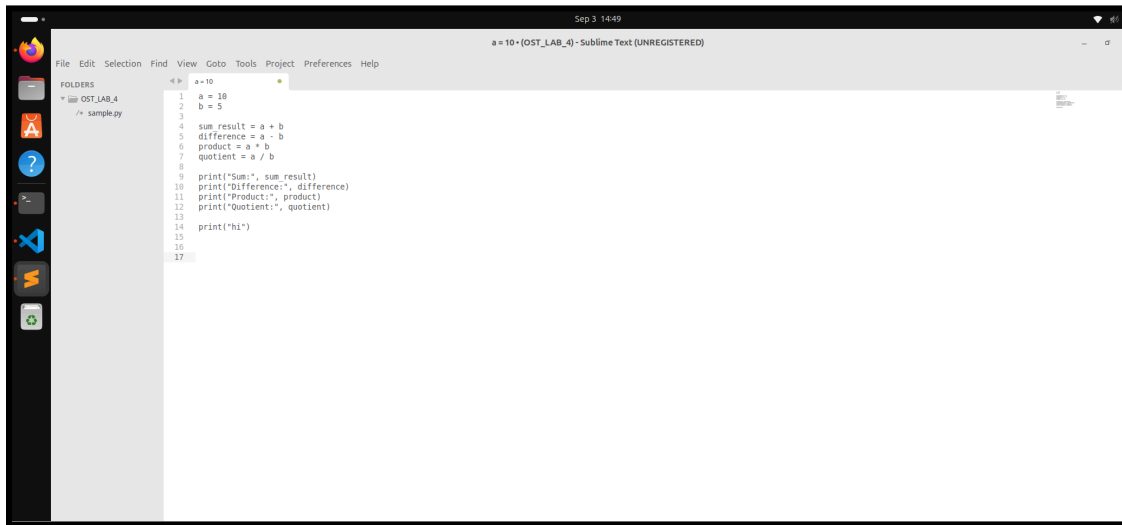
### 2) INSTALL

```
sysadmin@sysadmin:~$ sudo apt update
[sudo] password for sysadmin:
Hit:1 https://packages.microsoft.com/repos/vscode stable InRelease
Hit:2 http://archive.ubuntu.com/ubuntu noble InRelease
Hit:3 http://archive.ubuntu.com/ubuntu noble-updates InRelease [126 kB]
Hit:4 http://security.ubuntu.com/ubuntu noble-security InRelease
Hit:5 https://ppa.launchpadcontent.net/webupd8team/atom/ubuntu noble InRelease
Err:6 https://ppa.launchpadcontent.net/webupd8team/atom/ubuntu noble Release
404 Not Found [IP: 185.125.190.88 443]
Hit:7 https://download.sublimehq.com/apt/stable/ InRelease
Err:8 https://packagecloud.io/atom/distro/atom/any/debian InRelease
402 Payment Required [IP: 52.52.69.196 443]
Hit:9 http://archive.ubuntu.com/ubuntu noble-backports InRelease
Ign:1 https://packages.microsoft.com/repos/vscode stable InRelease
Err:10 https://packagecloud.io/atom/distro/atom/any/ubuntu InRelease
402 Payment Required [IP: 52.52.69.196 443]
Ign:1 https://packages.microsoft.com/repos/vscode stable InRelease
Err:1 https://packages.microsoft.com/repos/vscode stable InRelease
Bad header line Bad header data [IP: 13.107.246.68 443]
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
sysadmin@sysadmin:~$
```

```
Sep 3 14:46
sysadmin@sysadmin:~$
W: Target CNF (main/cnf/Commands-and64) is configured multiple times in /etc/apt/sources.list.d/archive_uri-https_packages_microsoft_com_repos_vscod
e-noble.list:1 and /etc/apt/sources
.list.d/vscode.list:1
W: Target CNF (main/cnf/Commands-all) is configured multiple times in /etc/apt/sources.list.d/archive_uri-https_packages_microsoft_com_repos_vscod
e-noble.list:1 and /etc/apt/sources.li
st.d/vscode.list:1
sysadmin@sysadmin:~$ sudo apt install apt-transport-https ca-certificates curl software-properties-common
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
apt-transport-https is already the newest version (2.7.14build2).
ca-certificates is already the newest version (20240203).
curl is already the newest version (8.5.0-2ubuntu10.3).
software-properties-common is already the newest version (0.99.48).
0 upgraded, 0 newly installed, 0 to remove and 7 not upgraded.
sysadmin@sysadmin:~$ curl -fsSL https://download.sublimetext.com/sublimehq-pub.gpg | sudo apt-key add -
Warning: apt-key is deprecated. Manage keyring files in trusted.gpg.d instead (see apt-key(8)).
OK
sysadmin@sysadmin:~$ sudo add-apt-repository "deb https://download.sublimetext.com/ stable main"
Repository: 'deb https://download.sublimetext.com/ stable main'
Description:
Archive for codename: stable components: main
More info: https://download.sublimetext.com/
Adding repository.
Press [ENTER] to continue or Ctrl-c to cancel.sudo apt update
Adding deb entry to /etc/apt/sources.list.d/archive_uri-https_download_sublimetext_com_noble.list
Adding disabled deb-src entry to /etc/apt/sources.list.d/archive_uri-https_download_sublimetext_com_noble.list
Hit:1 http://security.ubuntu.com/ubuntu noble-security InRelease
Hit:2 https://packages.microsoft.com/repos/vscode stable InRelease
Hit:3 http://archive.ubuntu.com/ubuntu noble InRelease
Hit:4 http://archive.ubuntu.com/ubuntu noble-updates InRelease
Hit:5 http://archive.ubuntu.com/ubuntu noble-backports InRelease
Hit:6 https://download.sublimetext.com apt/stable/ InRelease
Ign:7 https://download.sublimetext.com stable InRelease
Ign:8 https://ppa.launchpadcontent.net/webupd8team/atom/ubuntu noble InRelease
Err:9 https://download.sublimetext.com stable Release
 404 Not Found [IP: 104.236.0.104 443]
Err:10 https://packagecloud.io/AtomEditor/atom/any debian InRelease
 402 Payment Required [IP: 54.219.193.67 443]
Err:11 https://ppa.launchpadcontent.net/webupd8team/atom/ubuntu noble Release
 404 Not Found [IP: 185.125.190.80 443]
Ign:2 https://packages.microsoft.com/repos/vscode stable InRelease
Err:12 https://packagecloud.io/AtomEditor/atom/any ubuntu InRelease
 402 Payment Required [IP: 54.219.193.67 443]
Ign:2 https://packages.microsoft.com/repos/vscode stable InRelease
Err:2 https://packages.microsoft.com/repos/vscode stable InRelease
Bad header line Bad header data [IP: 13.107.246.48 443]
```

```
Sep 3 14:47
sysadmin@sysadmin:~$
N: See apt-secure(8) manpage for repository creation and user configuration details.
W: Target Packages (main/binary-and64/Packages) is configured multiple times in /etc/apt/sources.list.d/archive_uri-https_packages_microsoft_com_repos_vscod
e-noble.list:1 and /etc/ap
t/sources.list.d/vscode.list:1
W: Target Packages (main/binary-all/Packages) is configured multiple times in /etc/apt/sources.list.d/archive_uri-https_packages_microsoft_com_repos_vscod
e-noble.list:1 and /etc/ap
t/sources.list.d/vscode.list:1
W: Target Translations (main/i18n/Translation-en_US) is configured multiple times in /etc/apt/sources.list.d/archive_uri-https_packages_microsoft_com_repos_vscod
e-noble.list:1 and /etc
t/sources.list.d/vscode.list:1
W: Target Translations (main/i18n/Translation-en) is configured multiple times in /etc/apt/sources.list.d/archive_uri-https_packages_microsoft_com_repos_vscod
e-noble.list:1 and /etc/ap
t/sources.list.d/vscode.list:1
W: Target DEP-11 (main/dep11/Components-and64.yml) is configured multiple times in /etc/apt/sources.list.d/archive_uri-https_packages_microsoft_com_repos_vscod
e-noble.list:1 and /etc/a
pt/sources.list.d/vscode.list:1
W: Target DEP-11 (main/dep11/Components-all.yml) is configured multiple times in /etc/apt/sources.list.d/archive_uri-https_packages_microsoft_com_repos_vscod
e-noble.list:1 and /etc/ap
t/sources.list.d/vscode.list:1
W: Target DEP-11-Icons-small (main/dep11/Icons-48x48.tar) is configured multiple times in /etc/apt/sources.list.d/archive_uri-https_packages_microsoft_com_repos_vscod
e-noble.list:1 and /etc
t/sources.list.d/vscode.list:1
W: Target DEP-11-Icons (main/dep11/Icons-64x64.tar) is configured multiple times in /etc/apt/sources.list.d/archive_uri-https_packages_microsoft_com_repos_vscod
e-noble.list:1 and /etc
t/sources.list.d/vscode.list:1
W: Target DEP-11-Icons-hidpi (main/dep11/Icons-64x64@2.tar) is configured multiple times in /etc/apt/sources.list.d/archive_uri-https_packages_microsoft_com_repos_vscod
e-noble.list:1 and /etc
t/sources.list.d/vscode.list:1
W: Target CNF (main/cnf/Commands-and64) is configured multiple times in /etc/apt/sources.list.d/archive_uri-https_packages_microsoft_com_repos_vscod
e-noble.list:1 and /etc/ap
t/sources
.list.d/vscode.list:1
W: Target CNF (main/cnf/Commands-all) is configured multiple times in /etc/apt/sources.list.d/archive_uri-https_packages_microsoft_com_repos_vscod
e-noble.list:1 and /etc/ap
t/sources.li
st.d/vscode.list:1
sysadmin@sysadmin:~$ sudo apt install sublime-text
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following NEW packages will be installed:
sublime-text
0 upgraded, 1 newly installed, 0 to remove and 7 not upgraded.
Need to get 15.5 MB of archives.
After this operation, 50.9 MB of additional disk space will be used.
Get:1 https://download.sublimetext.com apt/stable/ sublime-text 4180 [15.5 MB]
Fetched 15.5 MB in 16s (974 kB/s)
Selecting previously unselected package sublime-text.
(Reading database ... 208886 files and directories currently installed.)
Preparing to unpack .../sublime-text_4180_and64.deb ...
Unpacking sublime-text (4180) ...
Setting up sublime-text (4180) ...
Processing triggers for desktop-file-utils (0.27-2build1) ...
Processing triggers for hicolor-icon-theme (0.17-2) ...
Processing triggers for gnome-menus (3.36.0-1.1ubuntu3) ...
sysadmin@sysadmin:~$
```

# THEMES IN SUBLIME TEXT



**CONCLUSION:-** Hence we have studied Development Environments Introduction to Integrated Development Environments (IDEs) and Text Editors, Using VSCode and Sublime Text, Customizing development environments. We have also studied about the purpose and key features of an IDE. We have studied brief details of text editors and IDE's.