EXPERIMENT NO: - 01

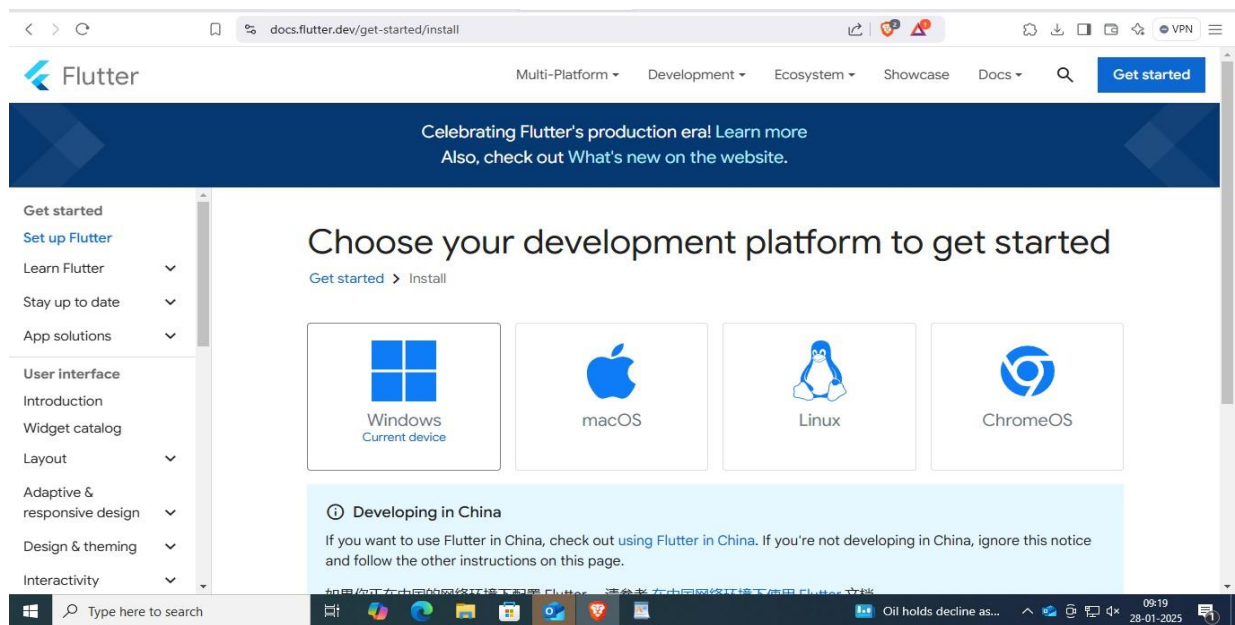**Name:-** Ronit Santwani   **Class:-** D15A   **Roll:No: -** 48

AIM: - Installation and Configuration of Flutter Environment.
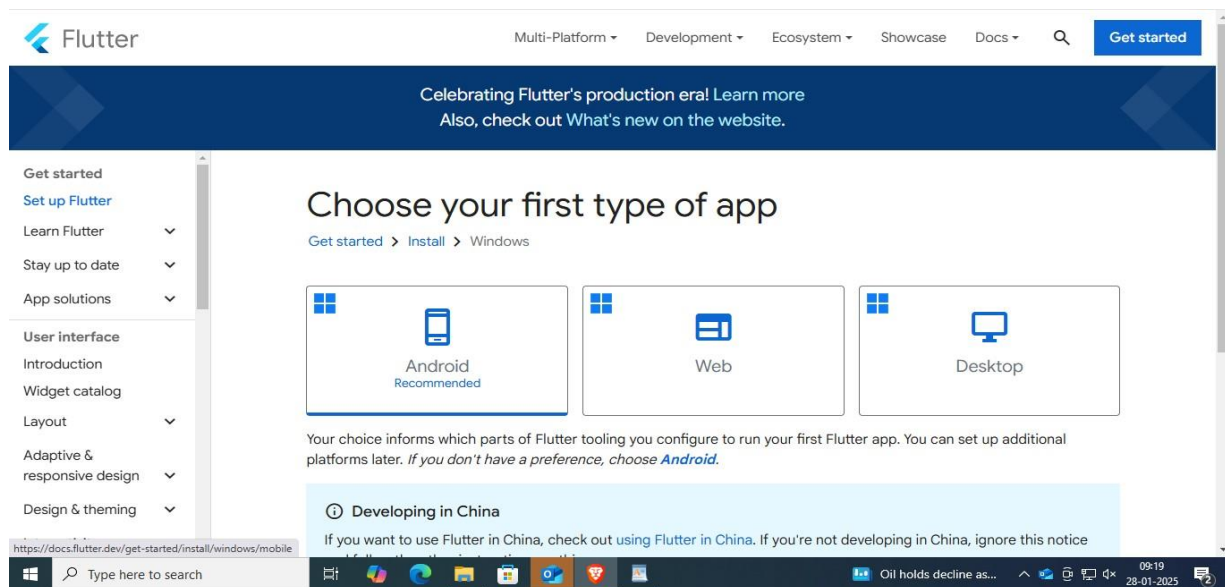

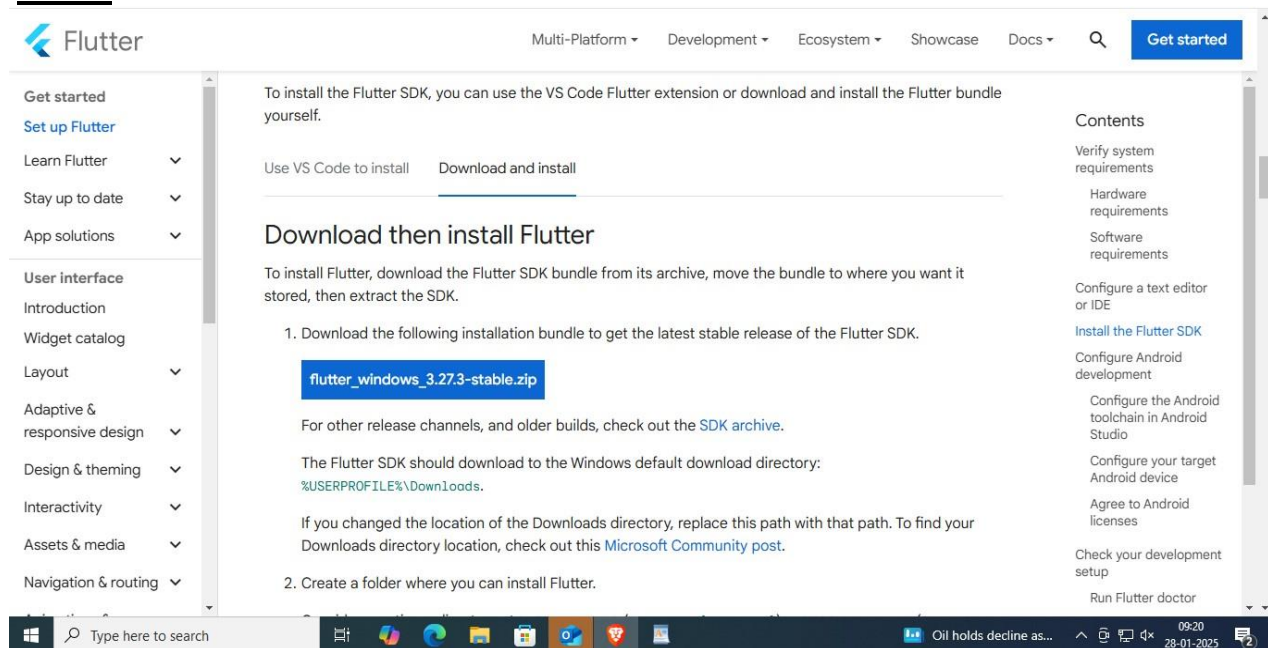**Step 1:** Go to the official Flutter website: https://docs.flutter.dev/get-started/install

Step 2: To download the latest Flutter SDK, click on the Windows icon > Android

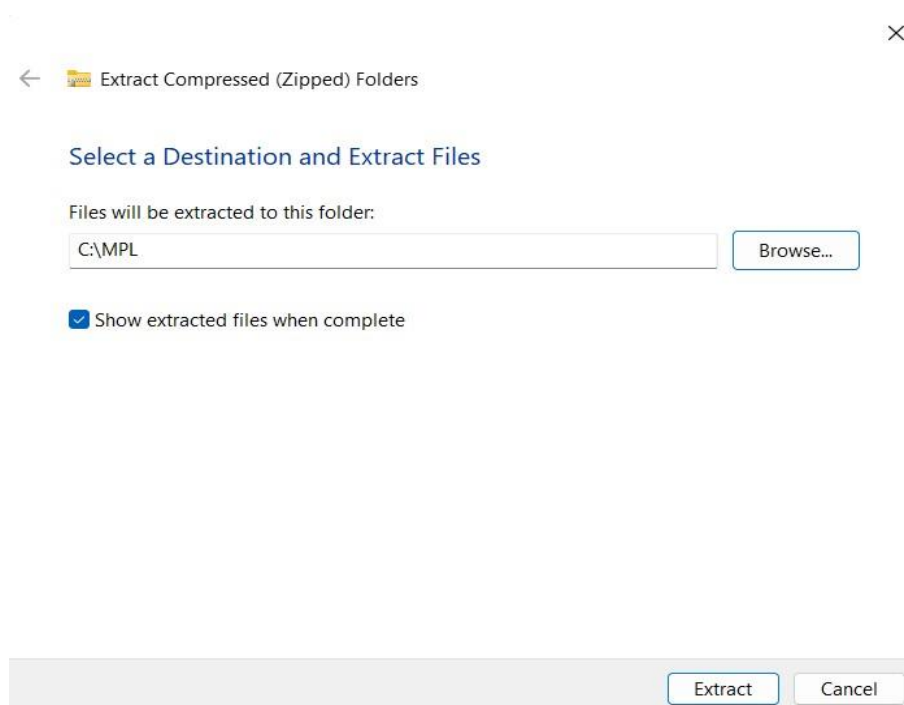**Step**

3: For Windows, download the stable release (a .zip file).

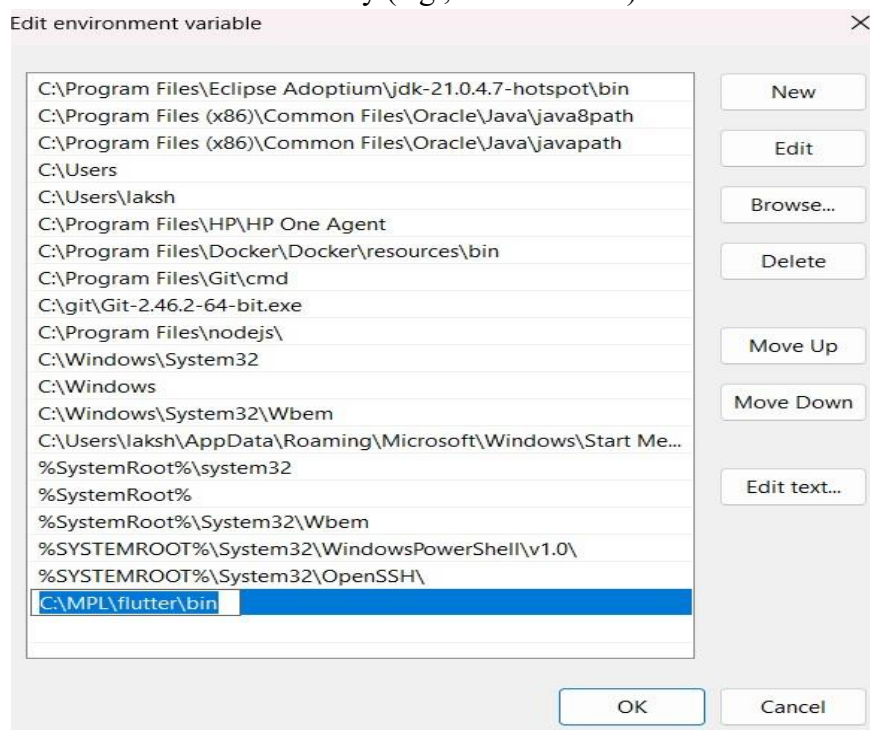**Step 4:** Extract the ZIP file to a folder (e.g., C:\flutter).

Step 5 :- Add Flutter to System PATH

Right-click on the Start Menu > System > Advanced system settings > Environment Variables.

Under System Variables, find Path and click Edit.

Add the full path to the flutter/bin directory (e.g., C:\flutter\bin).

Step

Step 6 : - Now, run the $ flutter command in command prompt.

```
Microsoft Windows [Version 10.0.26100.2894]
(c) Microsoft Corporation. All rights reserved.

C:\Users\laksh>flutter
Manage your Flutter app development.

Common commands:

  flutter create <output directory>
    Create a new Flutter project in the specified directory.

  flutter run [options]
    Run your Flutter application on an attached device or in an emulator.

Usage: flutter <command> [arguments]

Global options:
-h, --help                 Print this usage information.
-v, --verbose              Noisy logging, including all shell commands executed.
                           If used with "--help", shows hidden options. If used with "flutter doctor", shows additional
                           diagnostic information. (Use "-vv" to force verbose logging in those cases.)
-d, --device-id            Target device id or name (prefixes allowed).
    --version              Reports the version of this tool.
    --enable-analytics     Enable telemetry reporting each time a flutter or dart command runs.
    --disable-analytics    Disable telemetry reporting each time a flutter or dart command runs, until it is
                           re-enabled.
    --suppress-analytics   Suppress analytics reporting for the current CLI invocation.

Available commands:
```

7:- Run the $ flutter doctor command. This command checks for all the requirements of Flutter app development and displays a report of the status of your Flutter installation

```
C:\Users\laksh>flutter doctor
Doctor summary (to see all details, run flutter doctor -v):
[√] Flutter (Channel stable, 3.27.3, on Microsoft Windows [Version 10.0.26100.2894], locale en-IN)
[√] Windows Version (Installed version of Windows is version 10 or higher)
[X] Android toolchain - develop for Android devices
    X Unable to locate Android SDK.
      Install Android Studio from: https://developer.android.com/studio/index.html
      On first launch it will assist you in installing the Android SDK components.
      (or visit https://flutter.dev/to/windows-android-setup for detailed instructions).
      If the Android SDK has been installed to a custom location, please use
      `flutter config --android-sdk` to update to that location.

[√] Chrome - develop for the web
[X] Visual Studio - develop Windows apps
    X Visual Studio not installed; this is necessary to develop Windows apps.
      Download at https://visualstudio.microsoft.com/downloads/.
      Please install the "Desktop development with C++" workload, including all of its default components
[!] Android Studio (not installed)
[√] VS Code (version 1.96.3)
[√] VS Code, 64-bit edition (version 1.92.2)
[√] Connected device (3 available)
[√] Network resources

! Doctor found issues in 3 categories.
```

**Step 8 : -** Go to Android Studio and download the installer.

Download the latest version of Android Studio. For more information, see the Android Studio release notes.

Platform	Android Studio package	Size	SHA-256 checksum
Windows (64-bit)	android-studio-2024.2.2.13-windows.exe Recommended	1.2 GB	7d93dd9bf3539f948f609b1968507b1f502bf6965d2d44bd38a17ff26cb5dd3e
Windows (64-bit)	android-studio-2024.2.2.13-windows.zip No .exe installer	1.2 GB	855945962ff9b84ea49ce39de0bf4189dbf451ae37a6fab7999da013b046b7f7
Mac (64-bit)	android-studio-2024.2.2.13-mac.dmg	1.3 GB	acfbbe54d6ce8cf21f19b43510c7addcb9dde2824282f205fd1331be77d2e613
Mac (64-bit, ARM)	android-studio-2024.2.2.13-mac_arm.dmg	1.3 GB	688f8d007e612f3f0c18f316179079dc4565f93d8d1e6a7dad80c4cfce356df7
Linux (64-bit)	android-studio-2024.2.2.13-linux.tar.gz	1.3 GB	b7fe1ed4a7959bdaca7a8fd57461dbbf9a205eb23cc218ed828ed88e8b998cb5

Step 8.1: - When the download is complete, open the .exe file and run it. You will get the following dialog box

Step 8.2: - Select all the Checkboxes and Click on 'Next' Button.
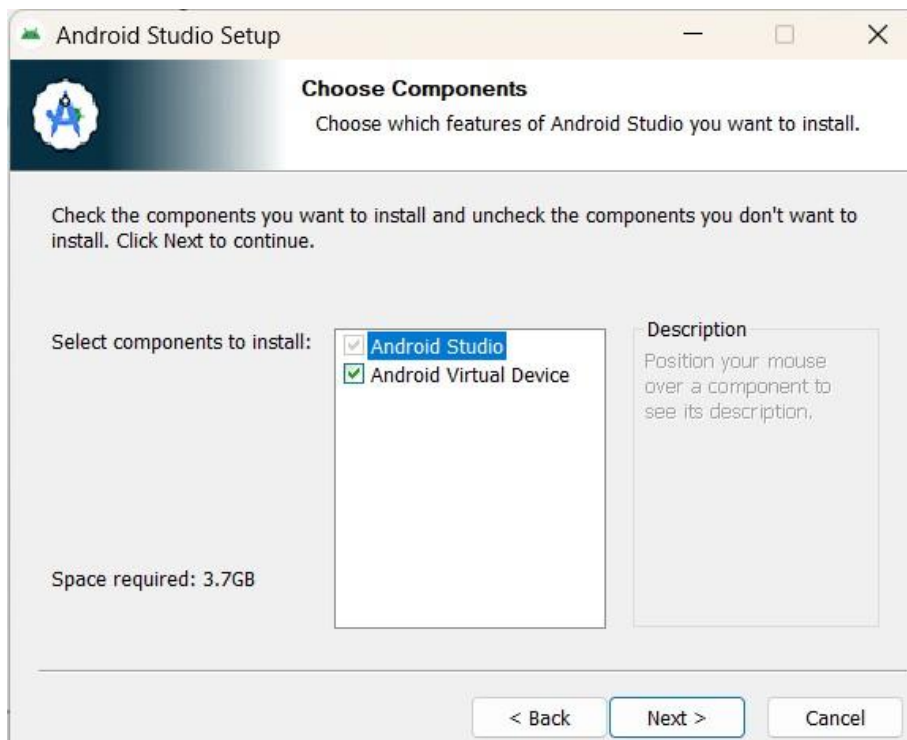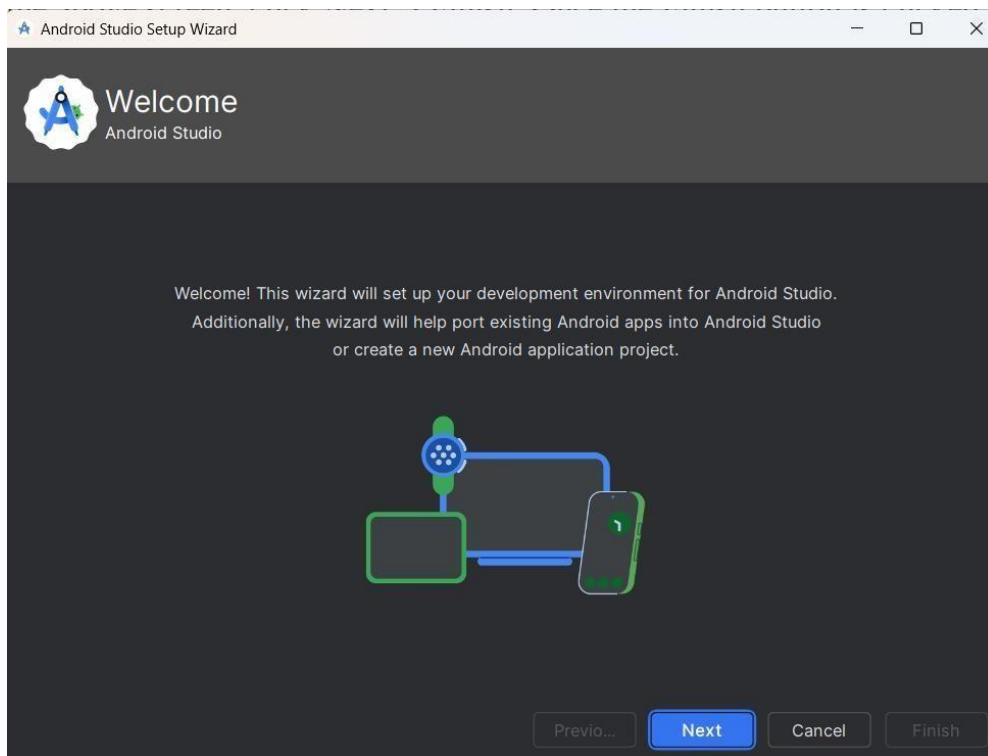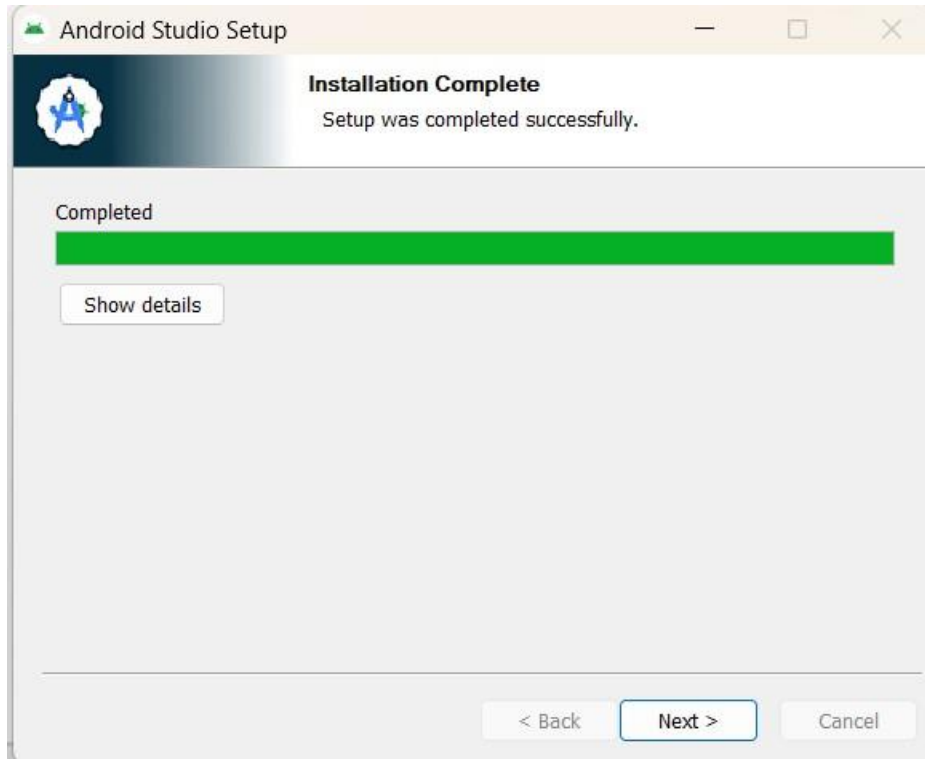
Step

8.3: - Change the destination as per your convenience and click on 'Next' Button.
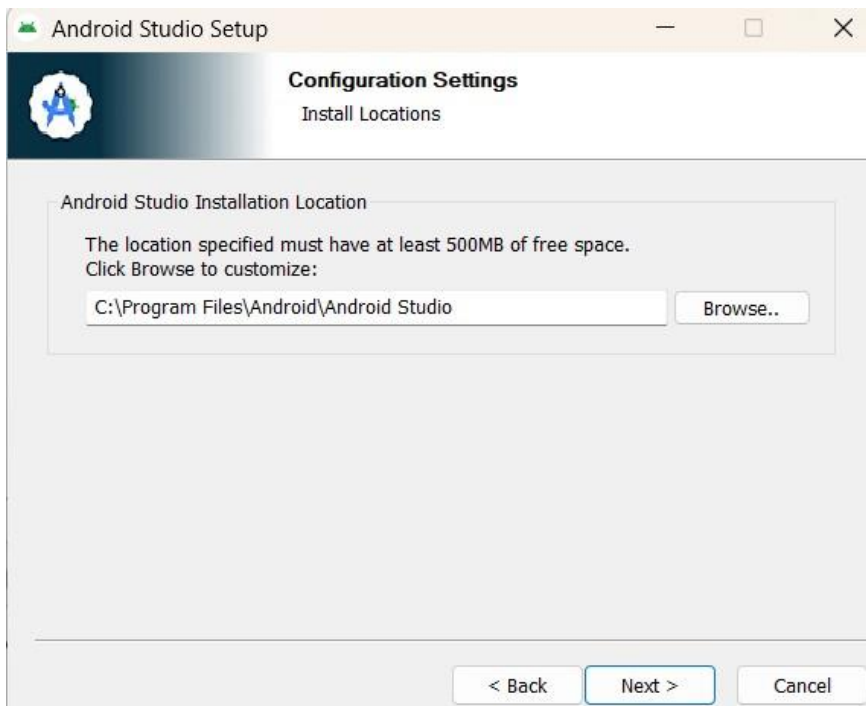
Step 8.4: - Follow the steps of the installation wizard. Once the installation wizard completes, you will get the following screen.
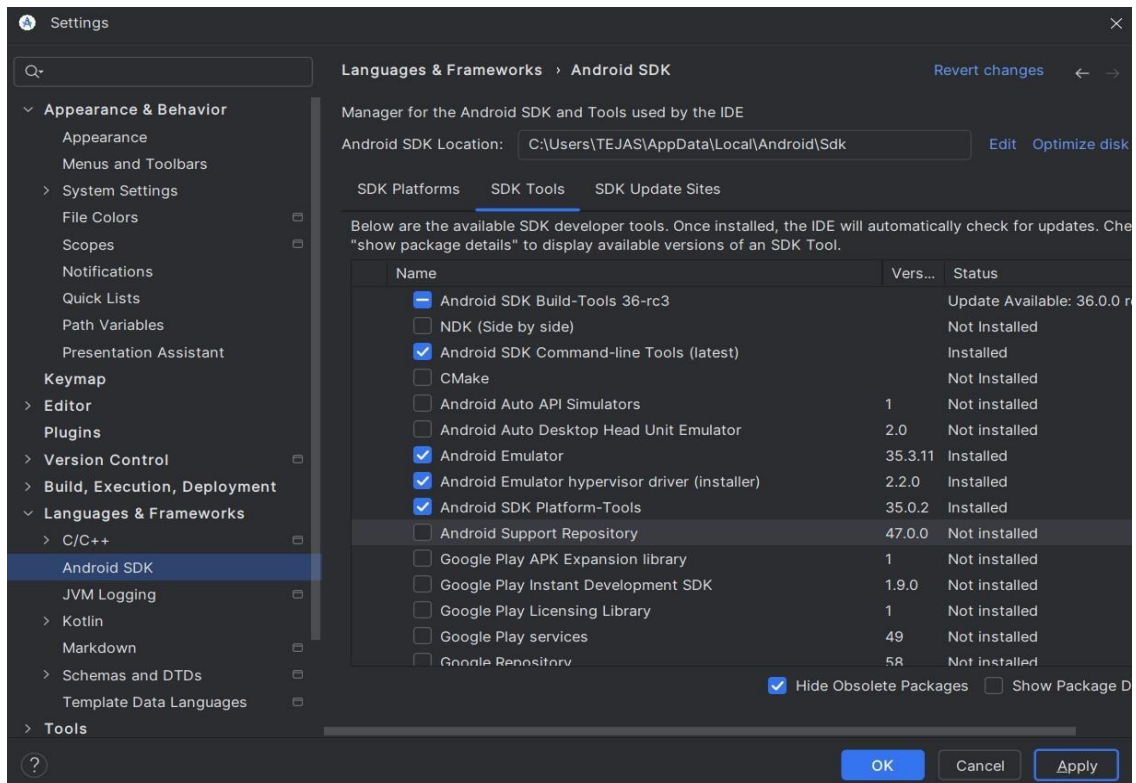
Step 8.5: - Go to Preferences > Appearance & Behavior > System Settings > Android SDK.

Select the SDK Tools tab and check Android SDK Command-line Tools and Install it.

Step

**9: -** Open a terminal and run the following command

```
C:\Users\laksh>flutter doctor
Doctor summary (to see all details, run flutter doctor -v):
[√] Flutter (Channel stable, 3.27.3, on Microsoft Windows [Version 10.0.26100.2894], locale en-IN)
[√] Windows Version (Installed version of Windows is version 10 or higher)
[√] Android toolchain - develop for Android devices (Android SDK version 35.0.1)
[√] Chrome - develop for the web
[X] Visual Studio - develop Windows apps
    X Visual Studio not installed; this is necessary to develop Windows apps.
      Download at https://visualstudio.microsoft.com/downloads/.
      Please install the "Desktop development with C++" workload, including all of its default components
[√] Android Studio (version 2024.2)
[√] VS Code (version 1.96.3)
[√] VS Code, 64-bit edition (version 1.92.2)
[√] Connected device (3 available)
[√] Network resources

! Doctor found issues in 1 category.
```
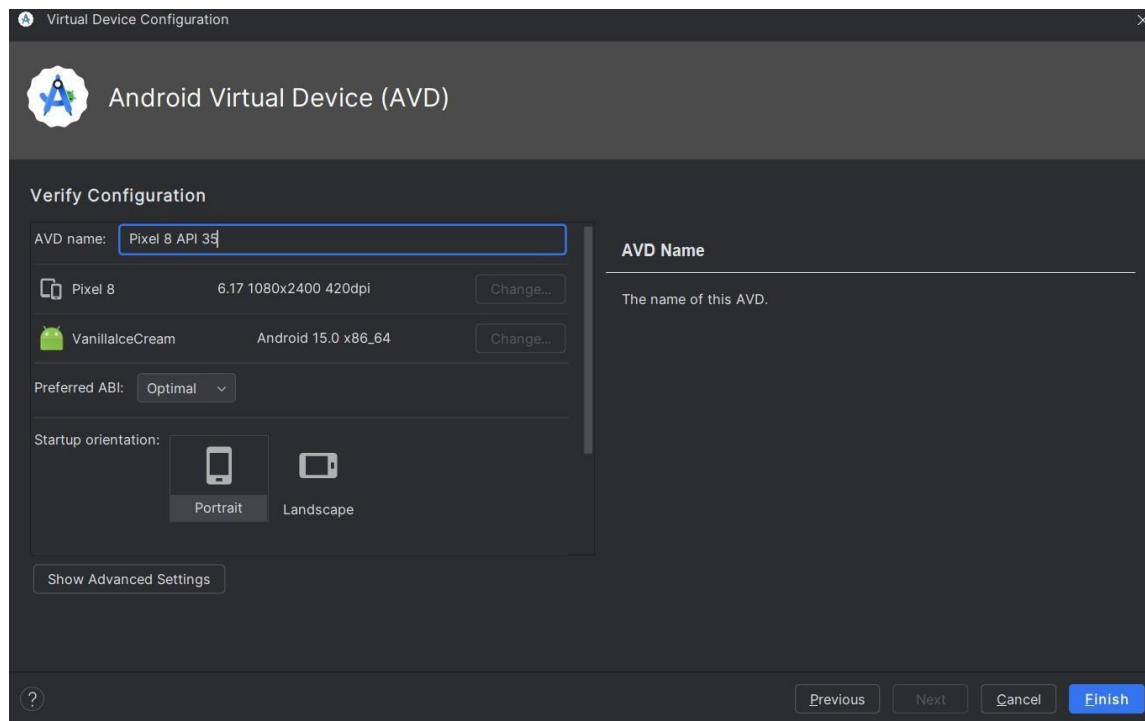
Step

     10: - Next, you need to set up an Android emulator. It is responsible for running and testing the Flutter application
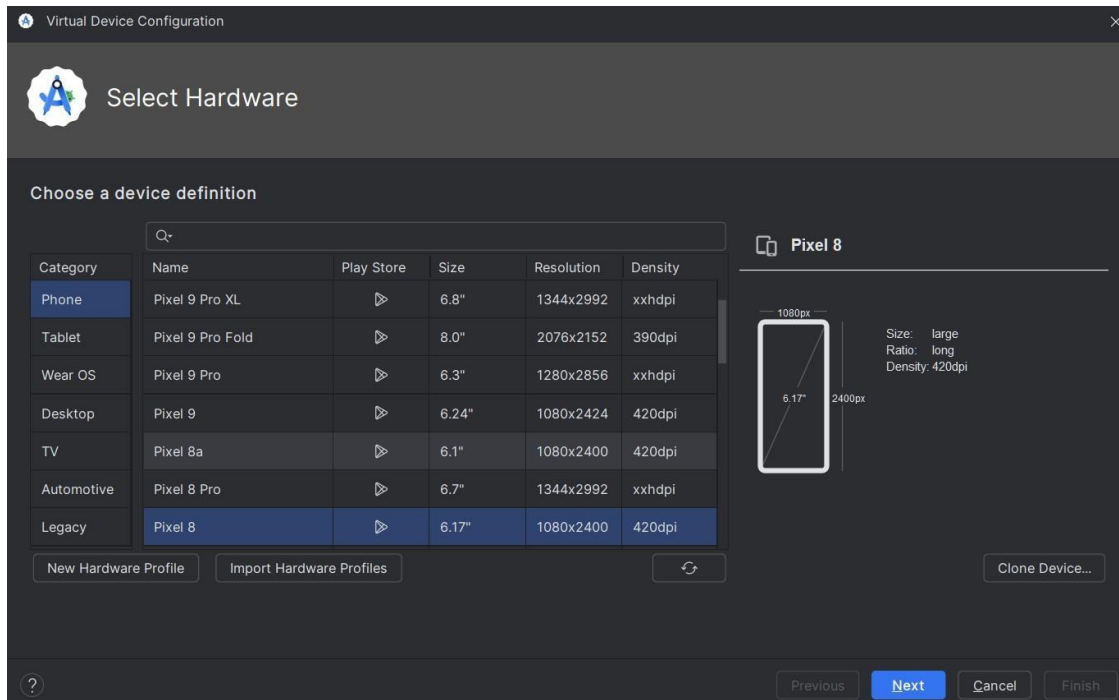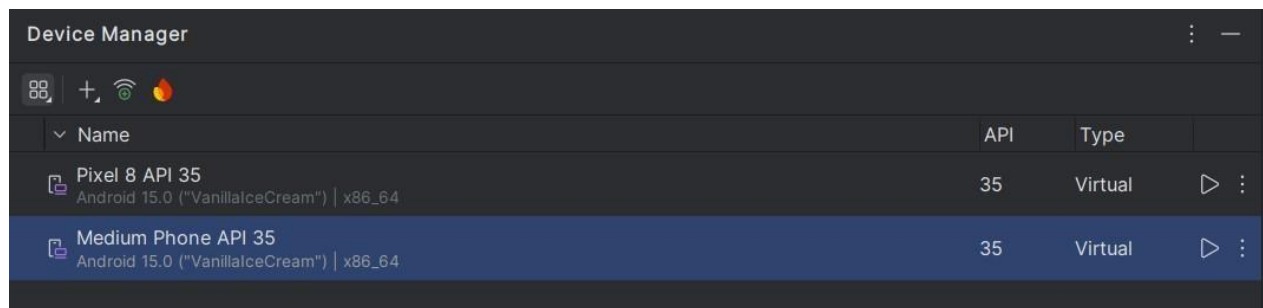

Step 10.1: - Open Android Studio and go to Tools > AVD Manager. Create a new virtual device.
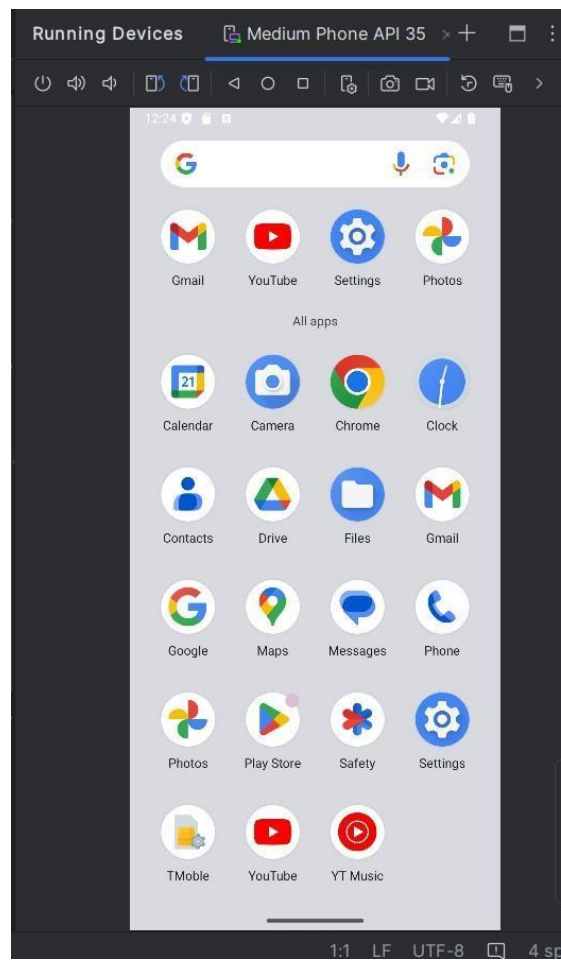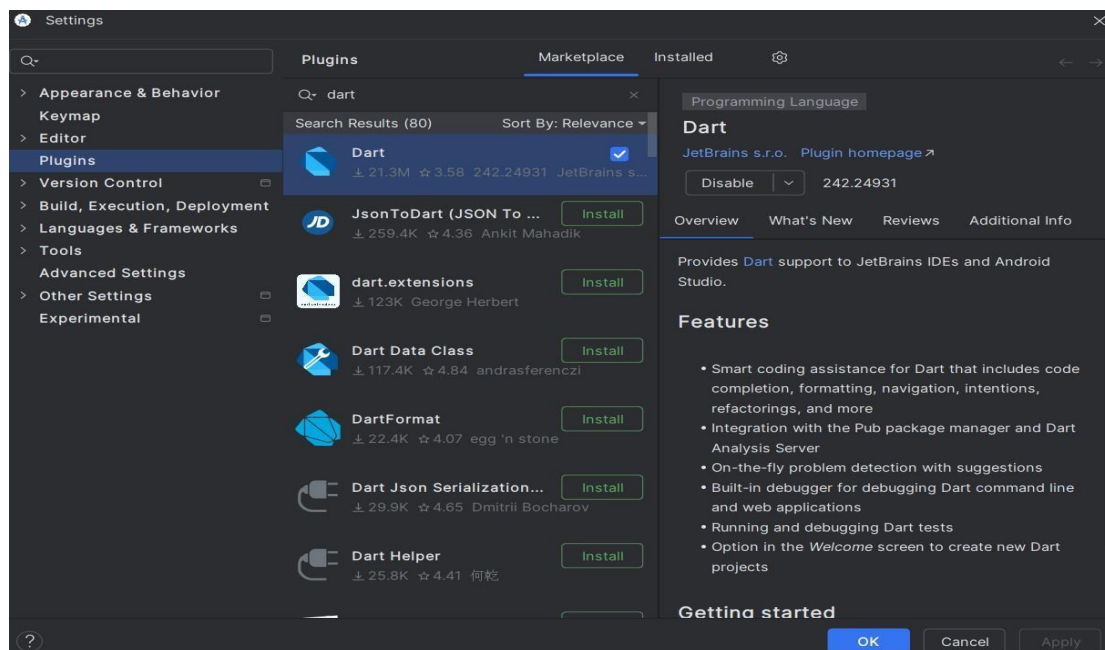
Step

10.2: - Click on the icon pointed into the red color rectangle. The Android emulator displayed as below screen
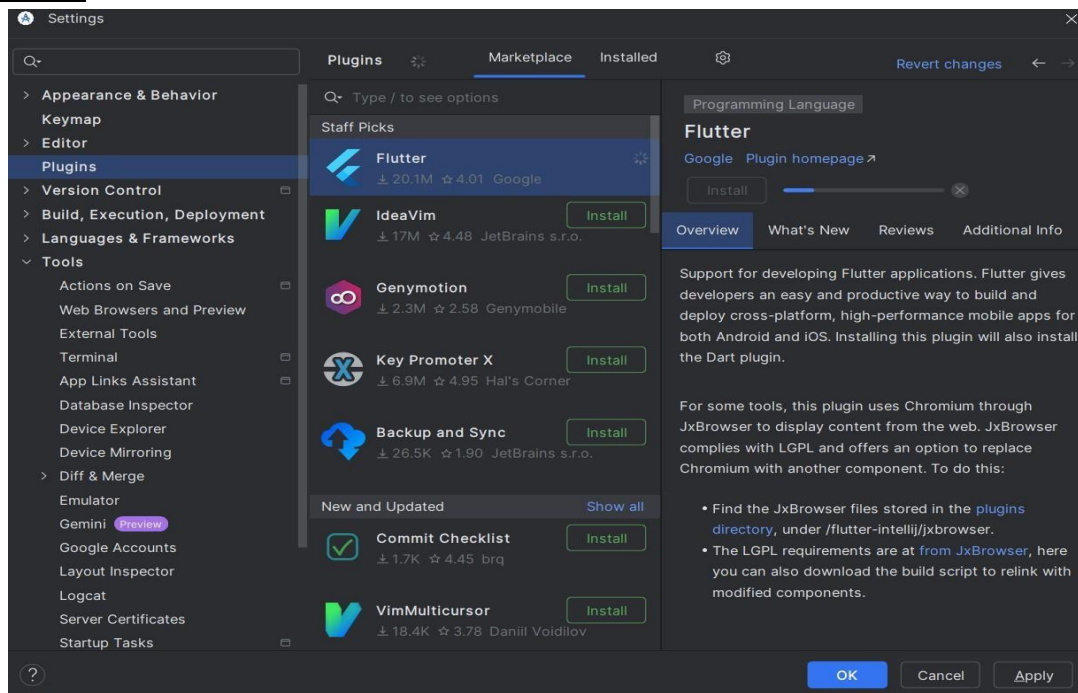
Step

11: - Now, install Flutter and Dart plugin for building Flutter application in Android Studio.

Step

These plugins provide a template to create a Flutter application, give an option to run and debug Flutter application in the Android Studio itself

Step 11.1: - Open the Android Studio and then go to File->Settings->Plugins. Now, search the Flutter plugin. If found, select Flutter plugin and click install

Step 11.2: - Restart the Android Studio

12: - Go to File > New Project > Create Flutter Project, then select the project name and location, and click Next to proceed.

Step

Hello Flutter

Hello Ronit