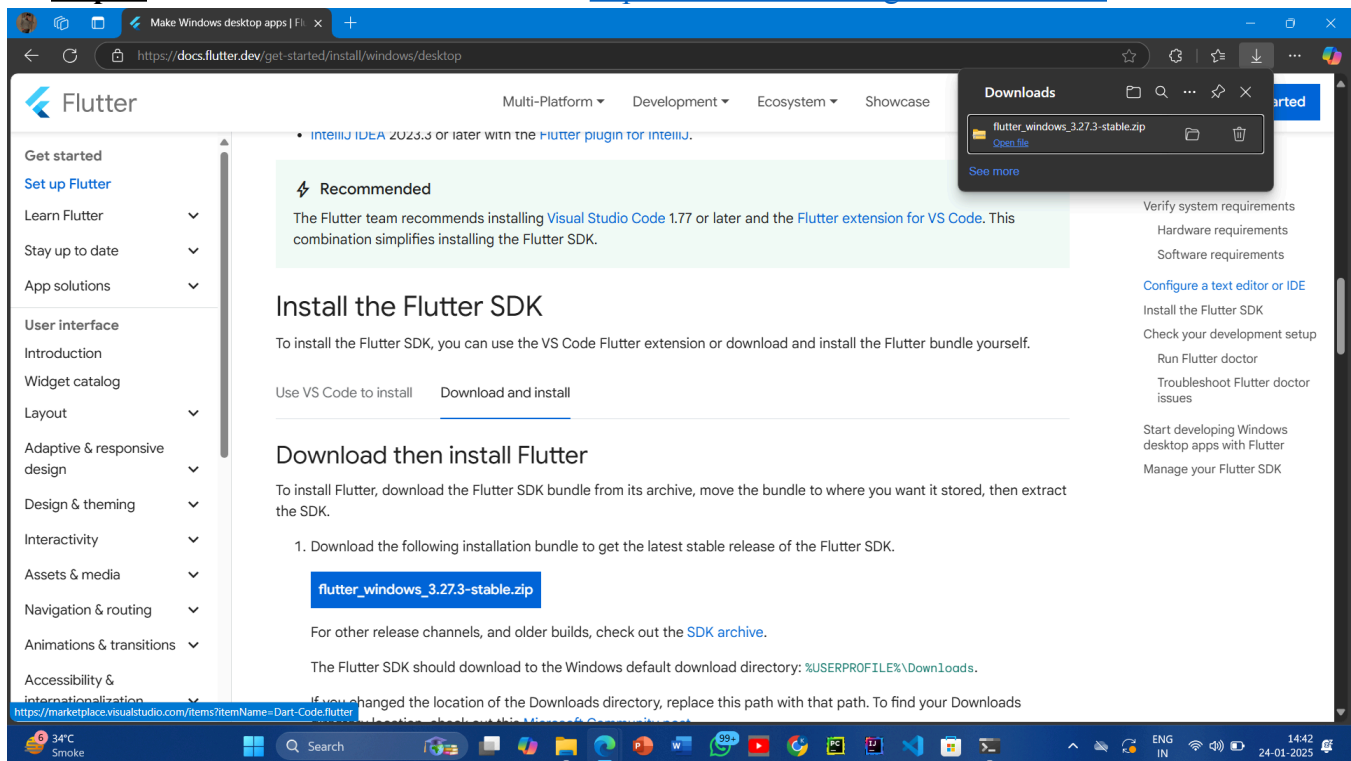
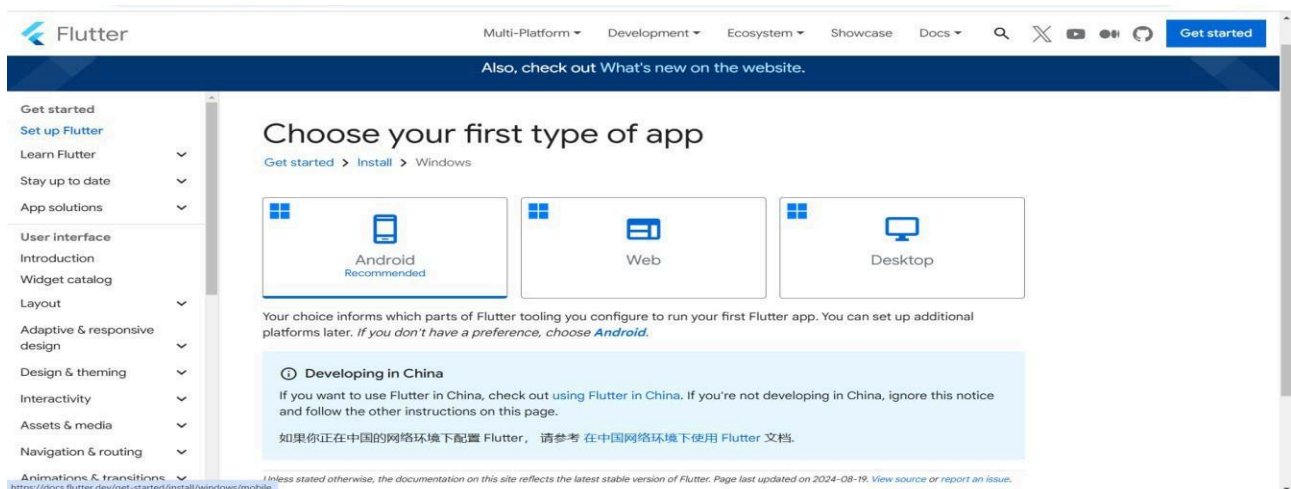
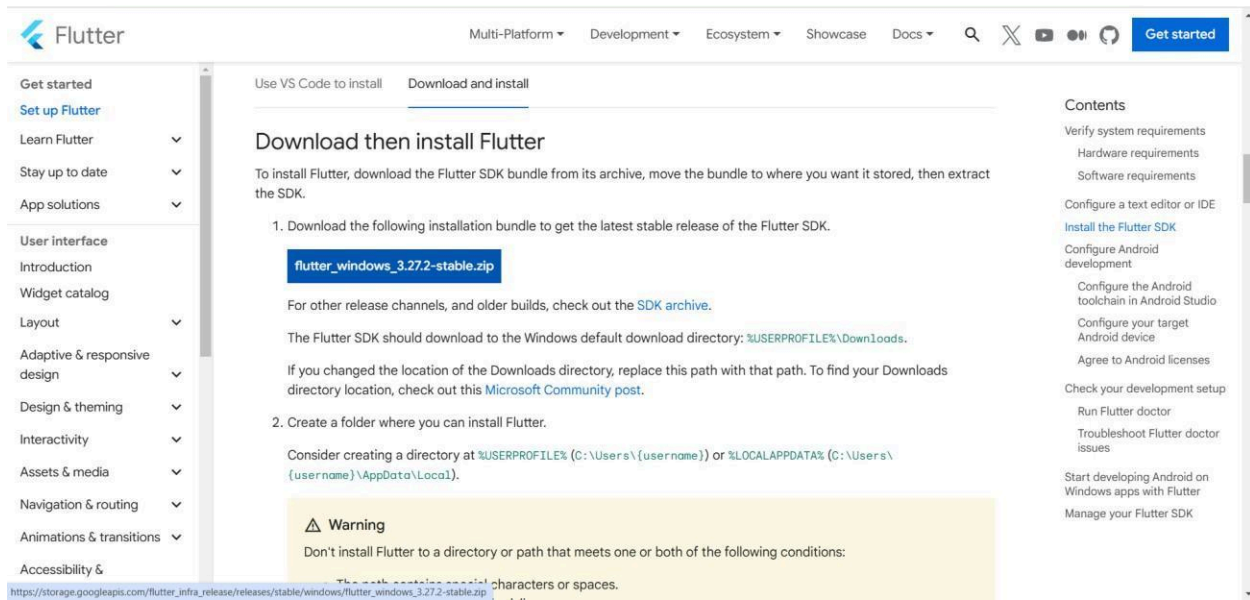
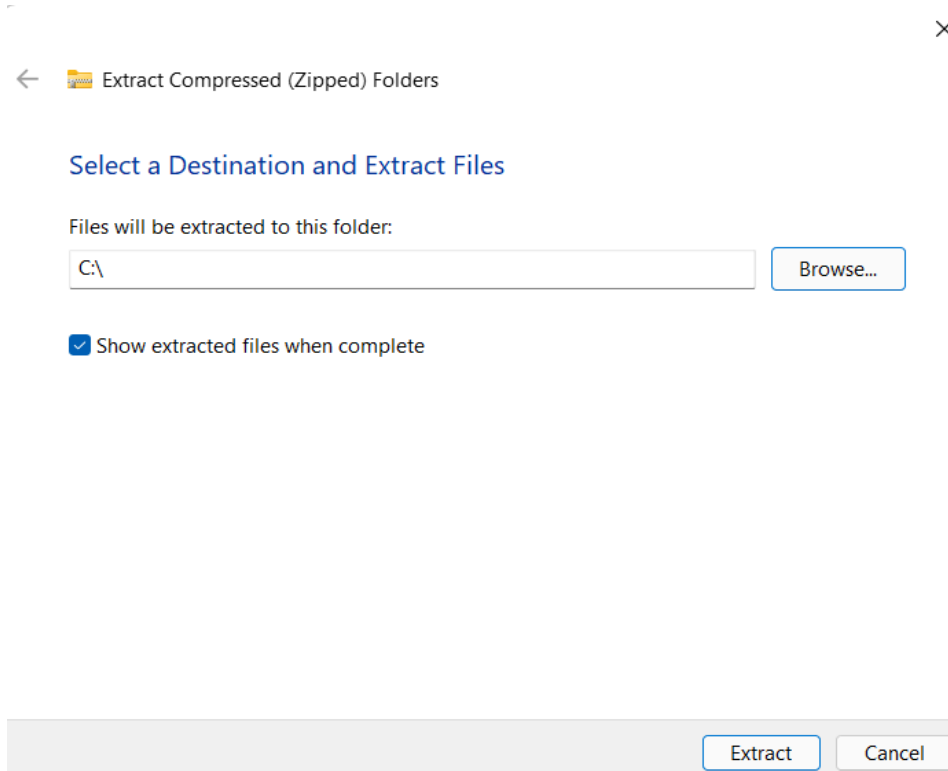


EXPERIMENT NO: - 01**Name:-** Kunal Punjabi**Class:-** D15A**Roll:No:-** 43**AIM:-** Installation and Configuration of Flutter Environment.**Step 1:** Go to the official Flutter website: <https://docs.flutter.dev/get-started/install>**Step 2:** To download the latest Flutter SDK, click on the Windows 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).

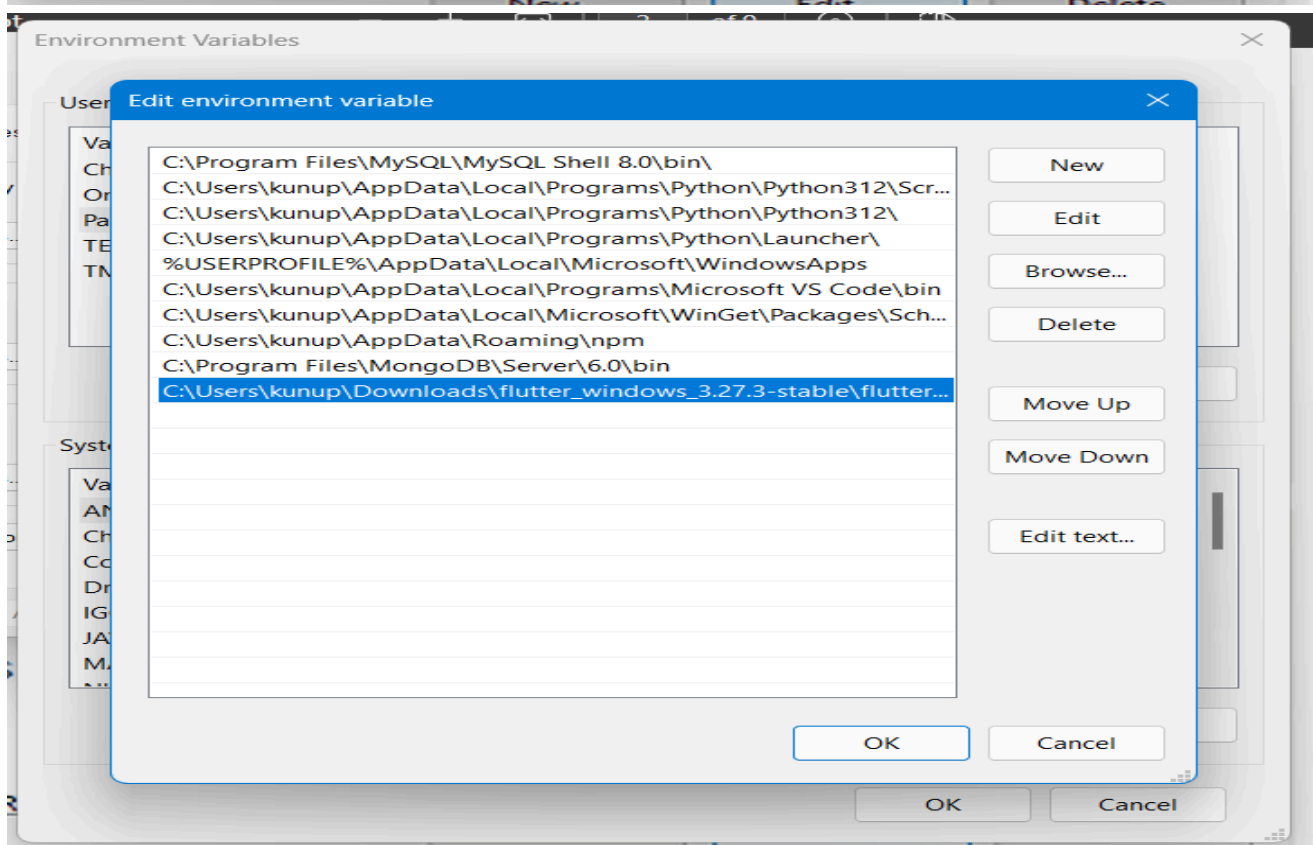
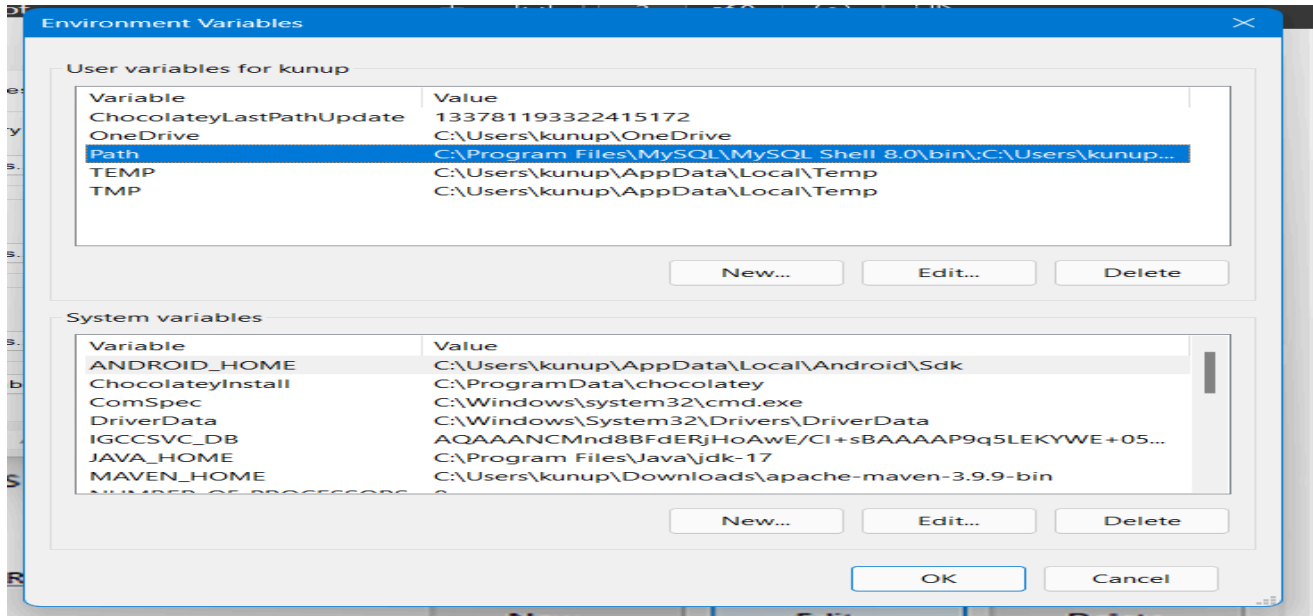


Step 5 :- Add Flutter to System PATH

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

```

Command Prompt - flutter  X  +  v

Microsoft Windows [Version 10.0.22631.4602]
(c) Microsoft Corporation. All rights reserved.

C:\Users\kunup>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:

Flutter SDK
bash-completion  Output command line shell completion setup scripts.
channel          List or switch Flutter channels.
config           Configure Flutter settings.
doctor           Show information about the installed tooling.
downgrade        Downgrade Flutter to the last active version for the current channel.
precache         Populate the Flutter tool's cache of binary artifacts.
upgrade          Upgrade your copy of Flutter.

Project
analyze          Analyze the project's Dart code.
assemble         Assemble and build Flutter resources.
build            Build an executable app or install bundle.
clean            Delete the build/ and .dart_tool/ directories.
create           Create a new Flutter project.
drive            Run integration tests for the project on an attached device or emulator.
gen-l10n         Generate localizations for the current project.
pub              Commands for managing Flutter packages.
run              Run your Flutter app on an attached device.
test             Run Flutter unit tests for the current project.

Tools & Devices
attach           Attach to a running app.
custom-devices  List, reset, add and delete custom devices.
devices         List all connected devices.
emulators       List, launch and create emulators.
install         Install a Flutter app on an attached device.
logs            Show log output for running Flutter apps.
screenshot      Take a screenshot from a connected device.
symbolize       Symbolize a stack trace from an AOT-compiled Flutter app.

Run "flutter help <command>" for more information about a command.
Run "flutter help -v" for verbose help output, including less commonly used options.

```

Step 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

```
Microsoft Windows [Version 10.0.22631.4751]
(c) Microsoft Corporation. All rights reserved.

C:\Users\kunup>flutter doctor
Doctor summary (to see all details, run flutter doctor -v):
[✓] Flutter (Channel stable, 3.27.3, on Microsoft Windows [Version 10.0.22631.4751], 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 1.96.4)
[✓] Connected device (3 available)
```

Welcome to Flutter! - <https://flutter.dev>

The Flutter tool uses Google Analytics to anonymously report feature usage statistics and basic crash reports. This data is used to help improve Flutter tools over time.

Flutter tool analytics are not sent on the very first run. To disable reporting, type 'flutter config --no-analytics'. To display the current setting, type 'flutter config'. If you opt out of analytics, an opt-out event will be sent, and then no further information will be sent by the Flutter tool.

By downloading the Flutter SDK, you agree to the Google Terms of Service. The Google Privacy Policy describes how data is handled in this service.

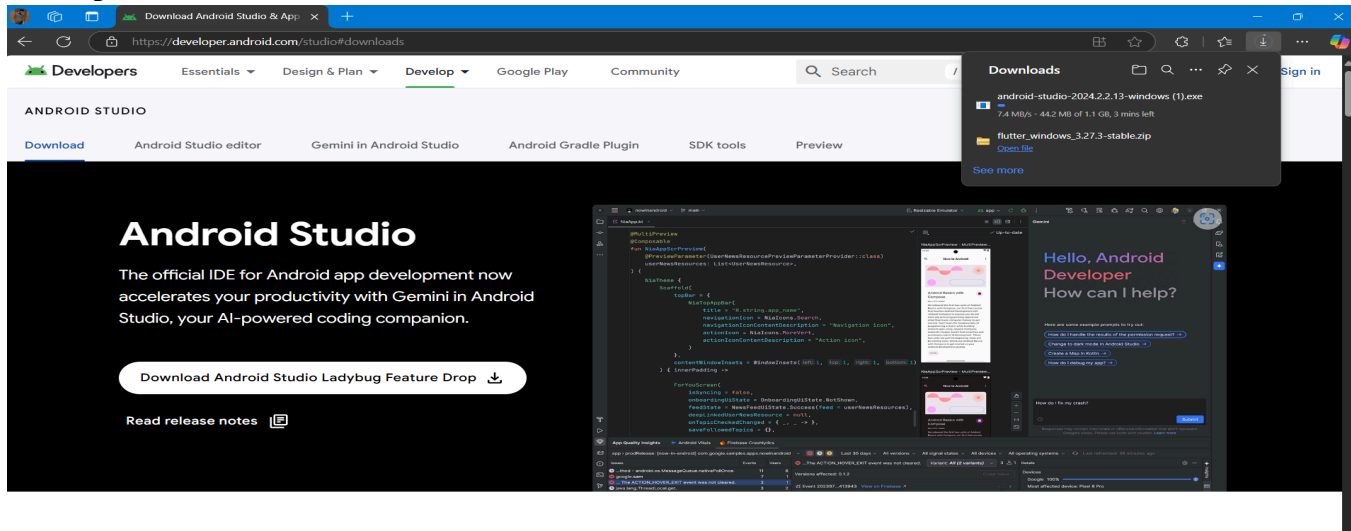
Moreover, Flutter includes the Dart SDK, which may send usage metrics and crash reports to Google.

Read about data we send with crash reports:
<https://flutter.dev/to/crash-reporting>

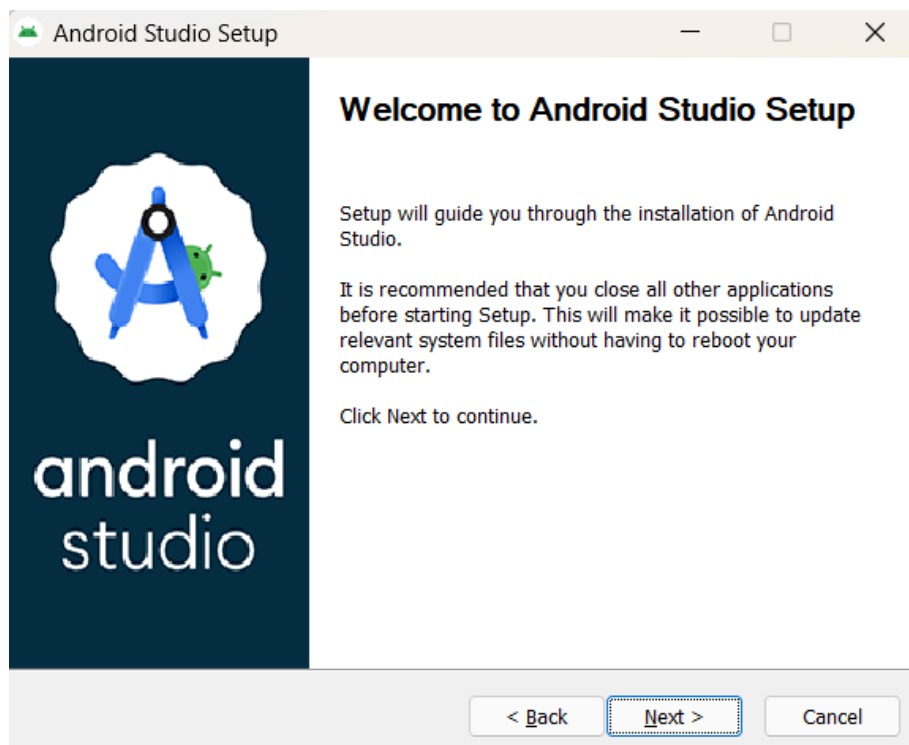
See Google's privacy policy:
<https://policies.google.com/privacy>

To disable animations in this tool, use
'flutter config --no-cli-animations'.

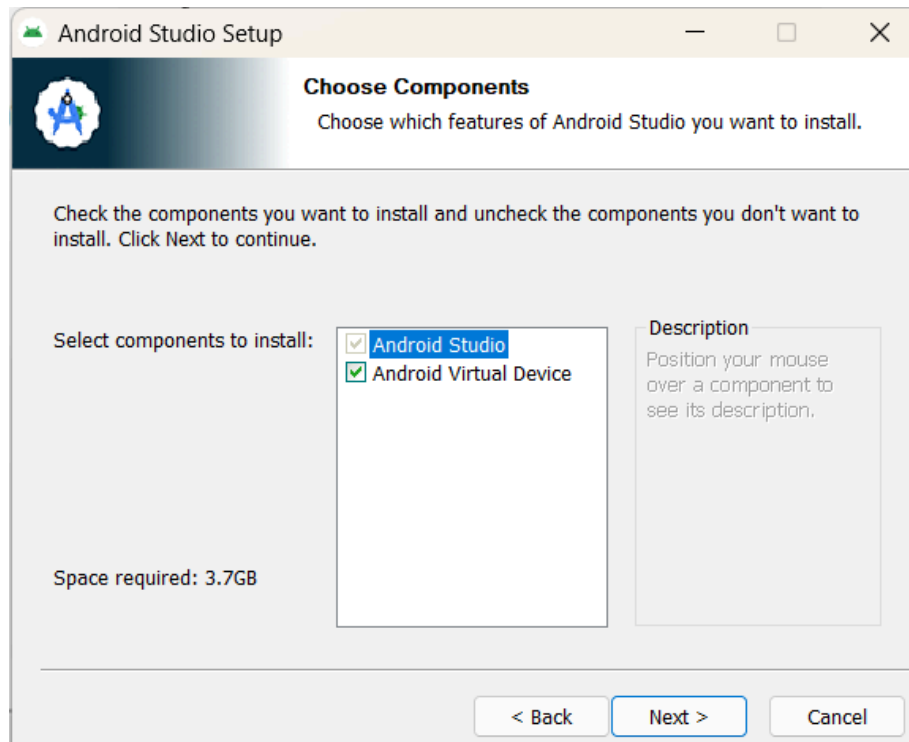
Step 8 :- Go to Android Studio and download the installer.



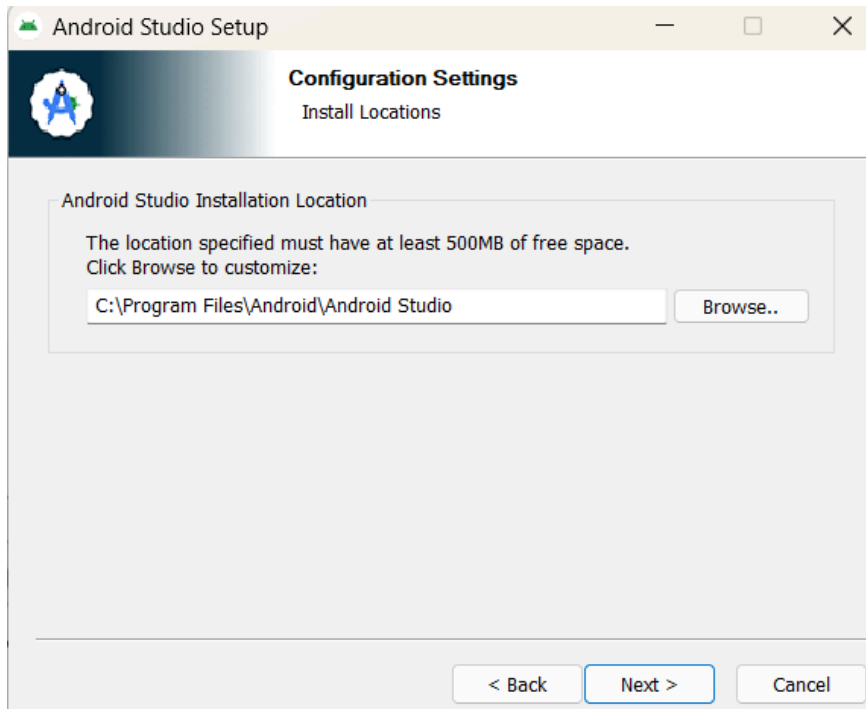
Step 8.1 :- When the download is complete, open the .exe file and run it. You will get the following dialog box



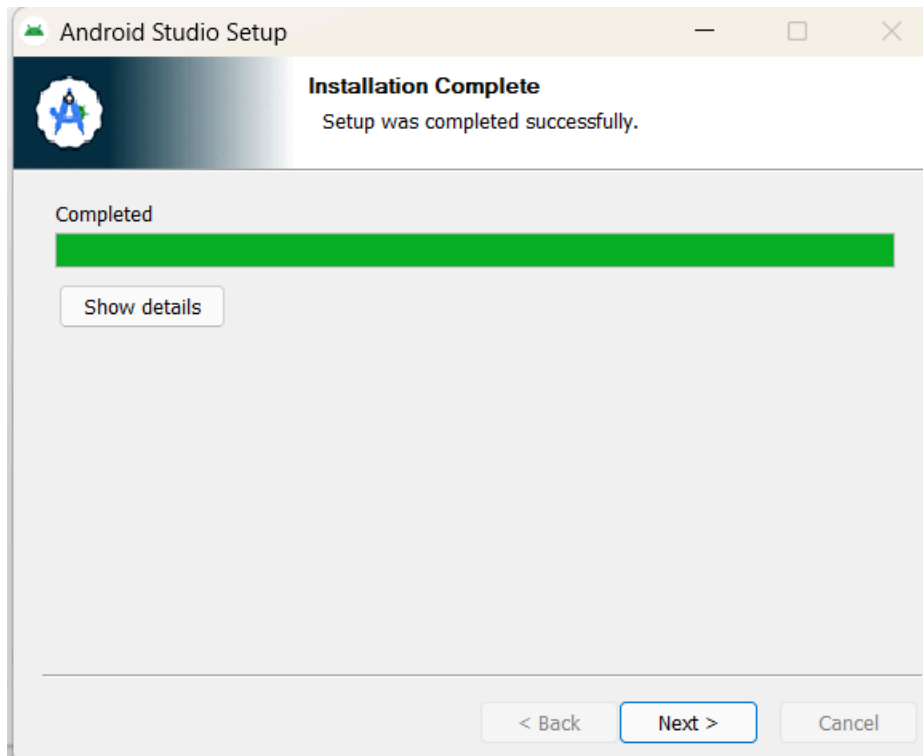
Step 8.2: - Select all the Checkboxes and Click on 'Next' Button.

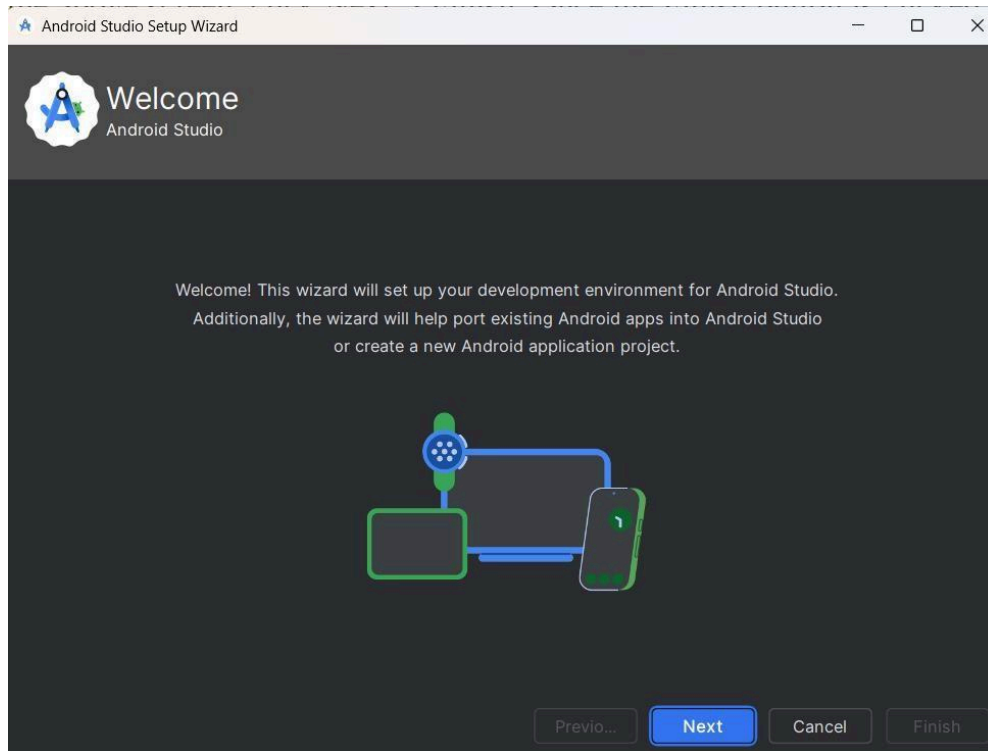


Step 8.3: - Change the destination as per your convenience and click on 'Next' Button.



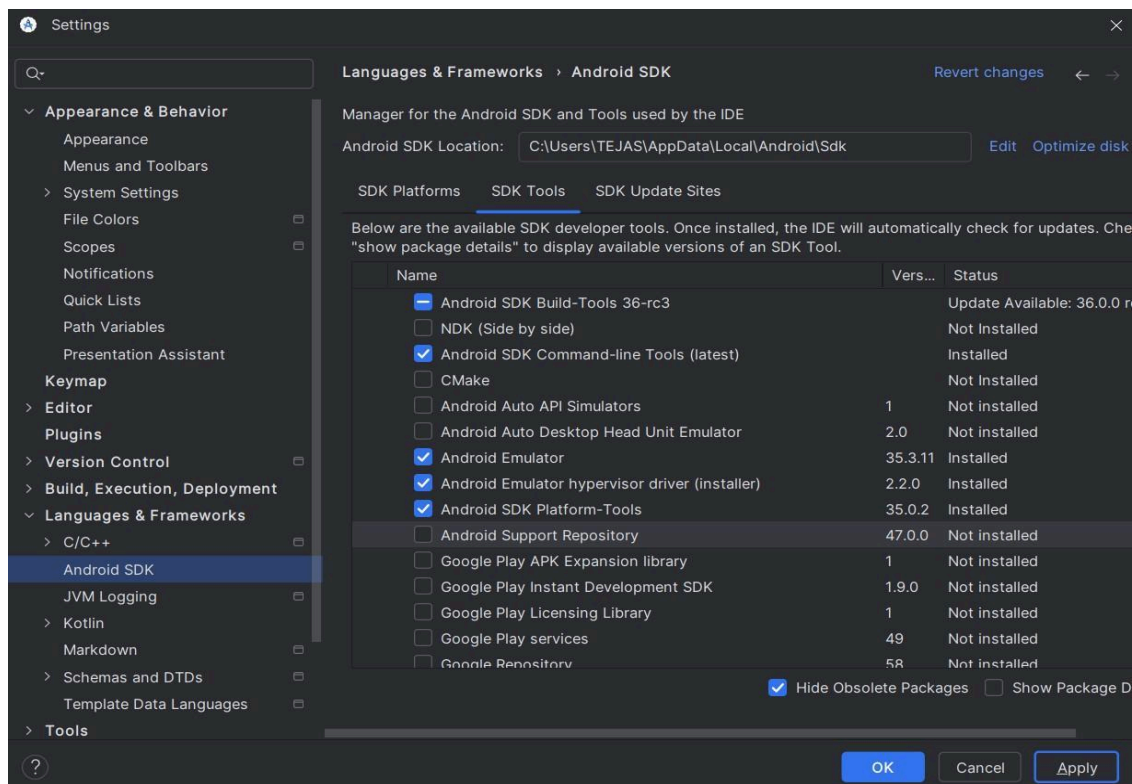
Step 8.4: - Follow the steps of the installation wizard. Once the installation wizard completes, you will get the following screen.





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.



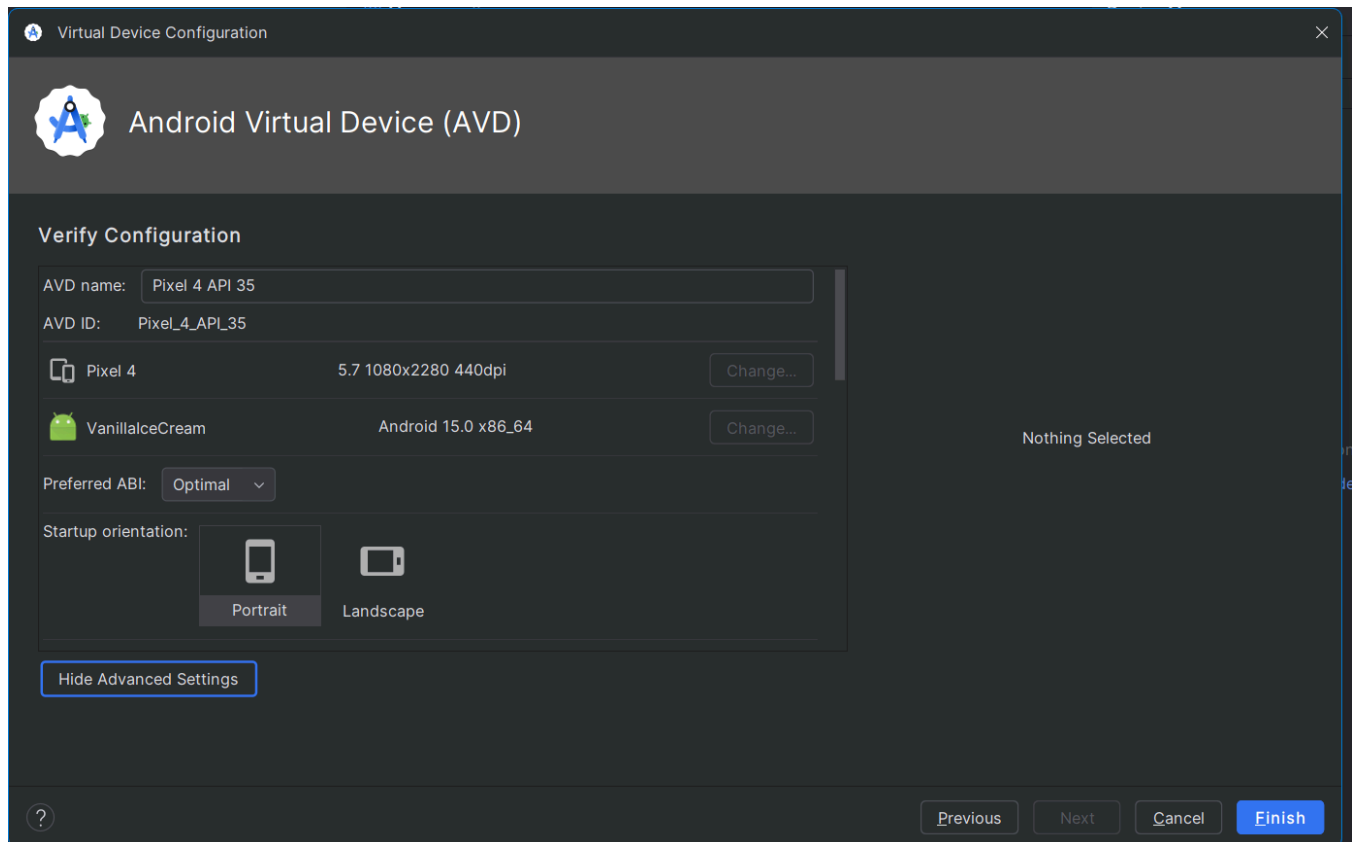
Step 9:- Open a terminal and run the following command

```
All SDK package licenses accepted

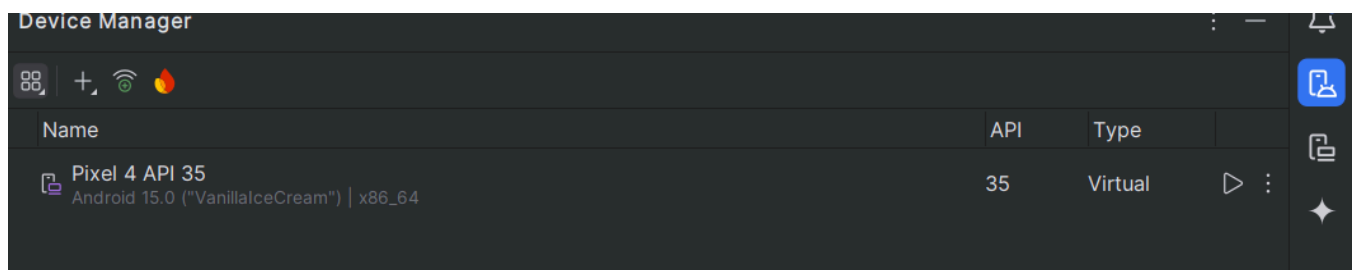
C:\Users\kunup>flutter doctor
Doctor summary (to see all details, run flutter doctor -v):
[✓] Flutter (Channel stable, 3.27.3, on Microsoft Windows [Version 10.0.22631.4602], locale en-IN)
[✓] Windows Version (Installed version of Windows is version 10 or higher)
[✓] Android toolchain - develop for Android 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 1.96.4)
[✓] Connected device (3 available)
[✓] Network resources

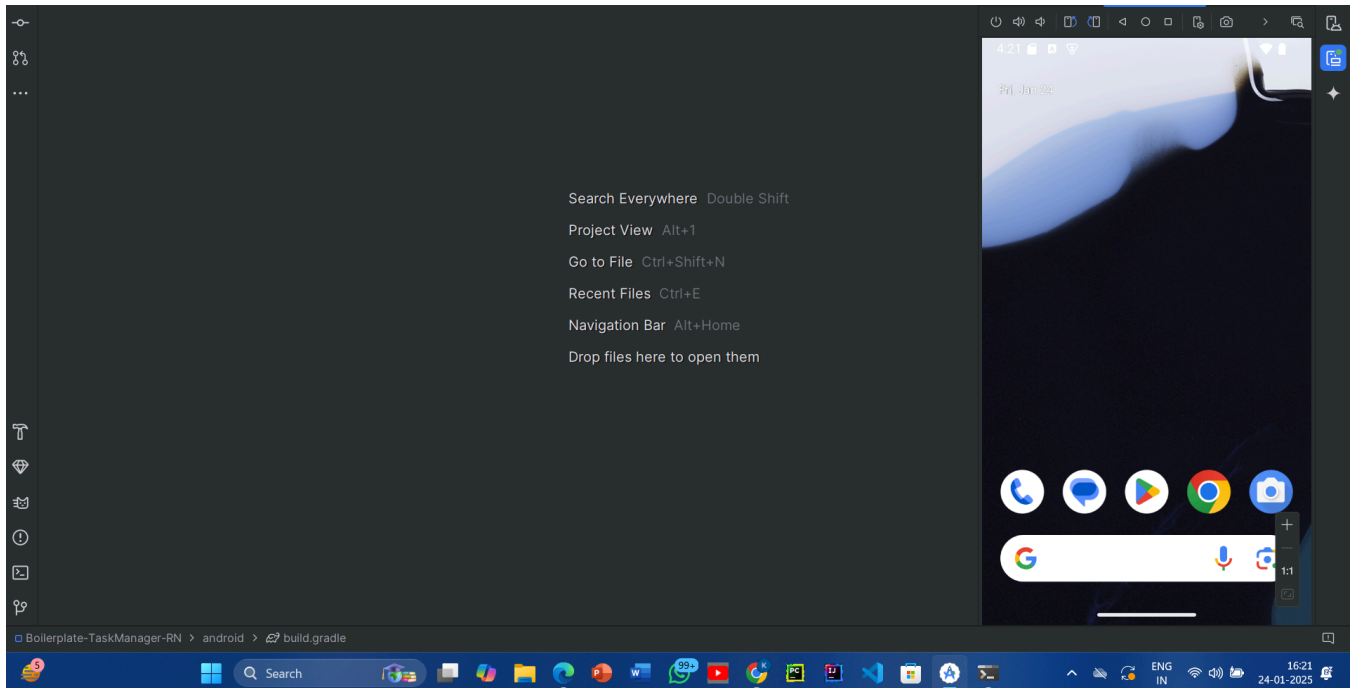
! Doctor found issues in 1 category.
```

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



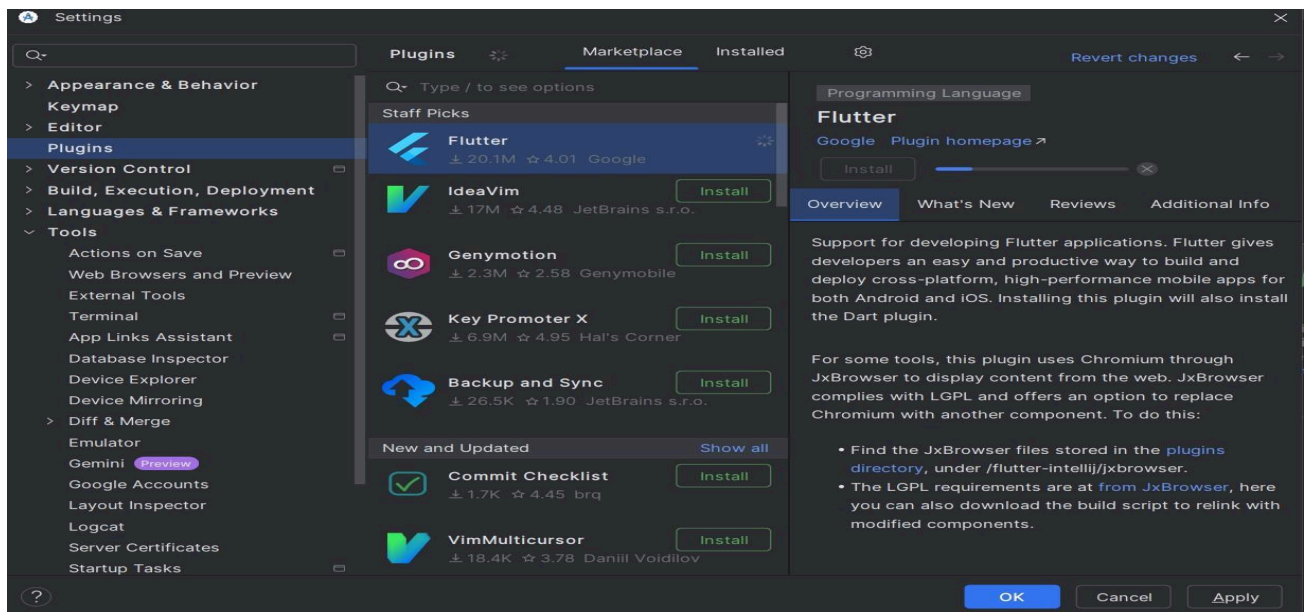
Step 10.2:- Click on the icon pointed into the red color rectangle. The Android emulator displayed as below screen

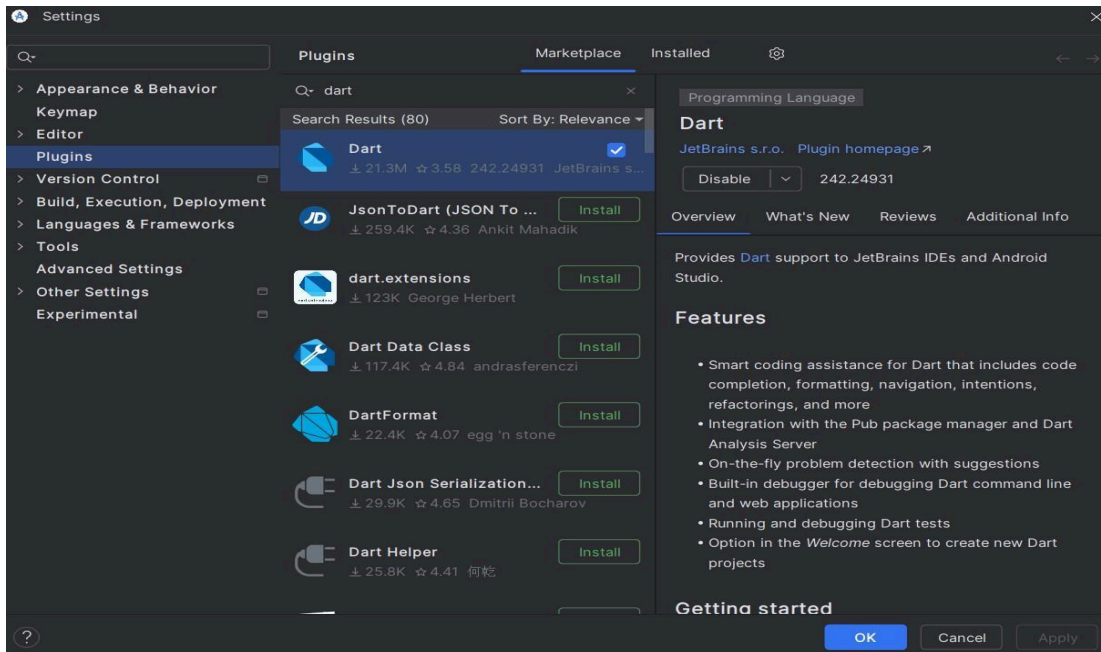




Step 11: - Now, install Flutter and Dart plugin for building Flutter application in Android Studio. These plugins provide a template to create a Flutter application, give an option to run and debug Flutter application in the Android Studio itself

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

