

EXPERIMENT NO: 1

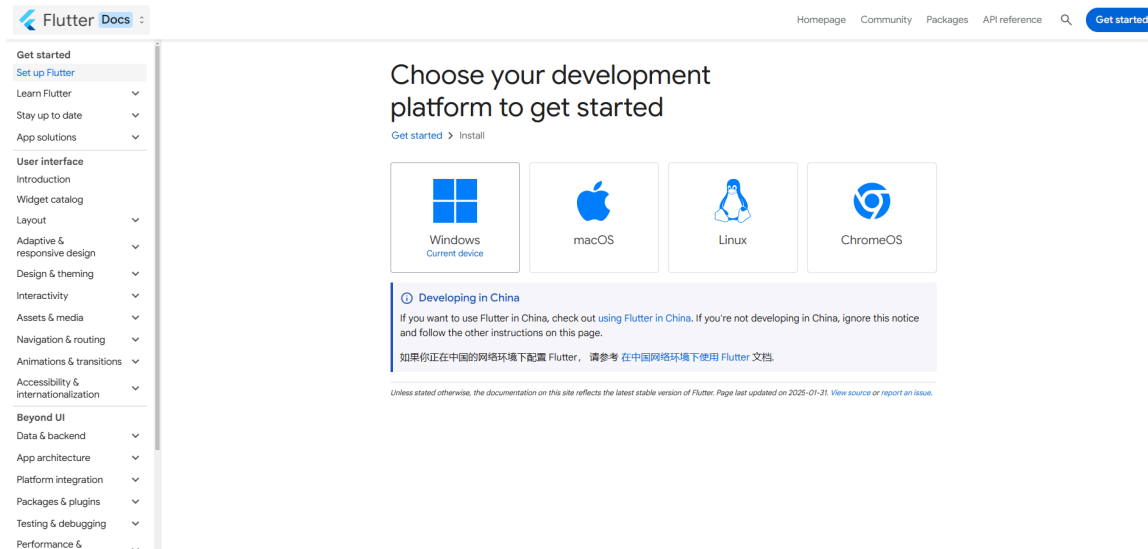
Name : Vedang V. Wajge

Class : D15A

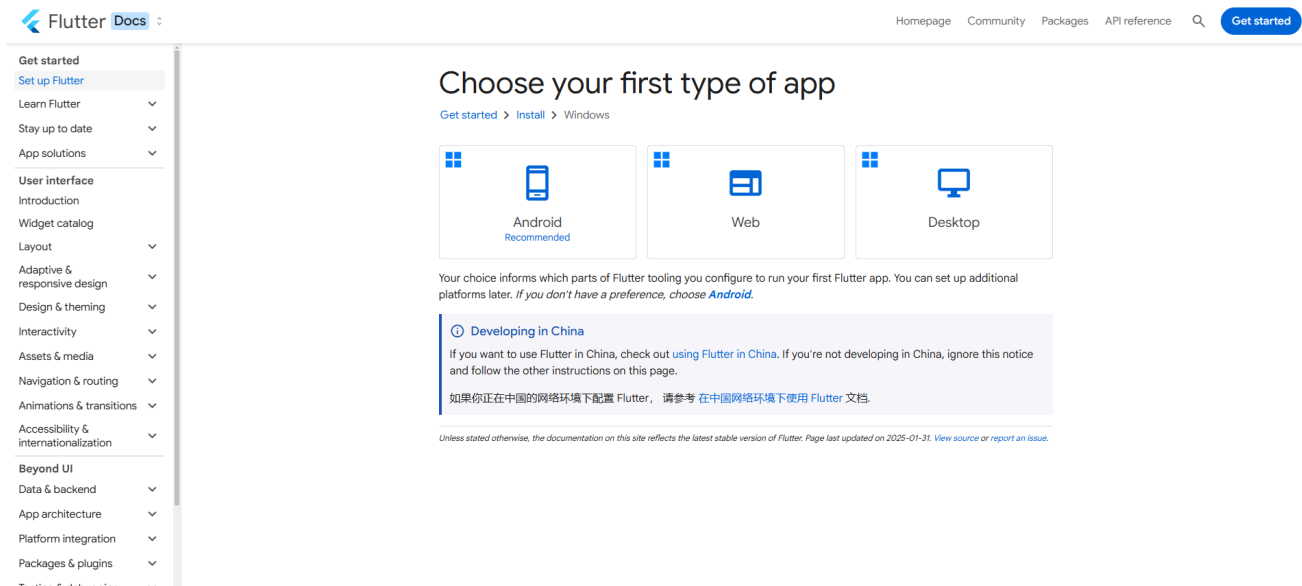
Roll No: 62

AIM: - Installation and Configuration of Flutter Environment.

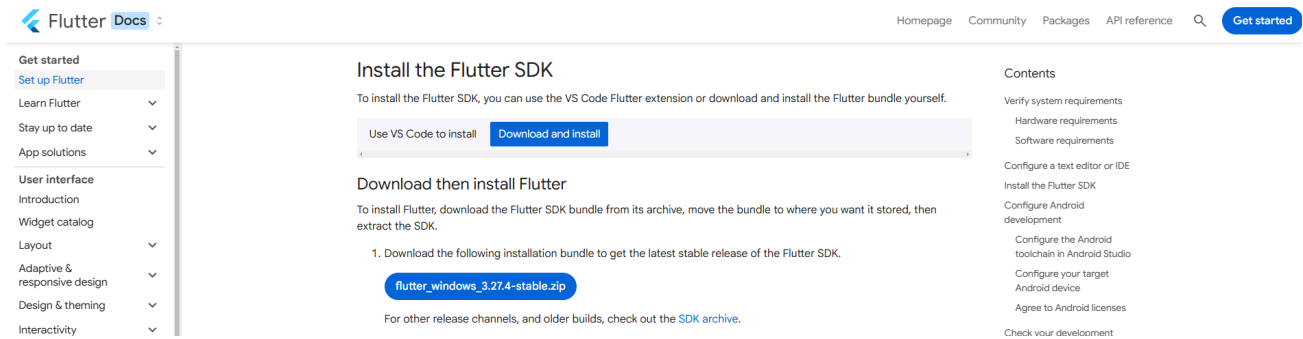
Step 1: Go to the official Flutter website: <https://docs.flutter.dev/get-started/install>



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).



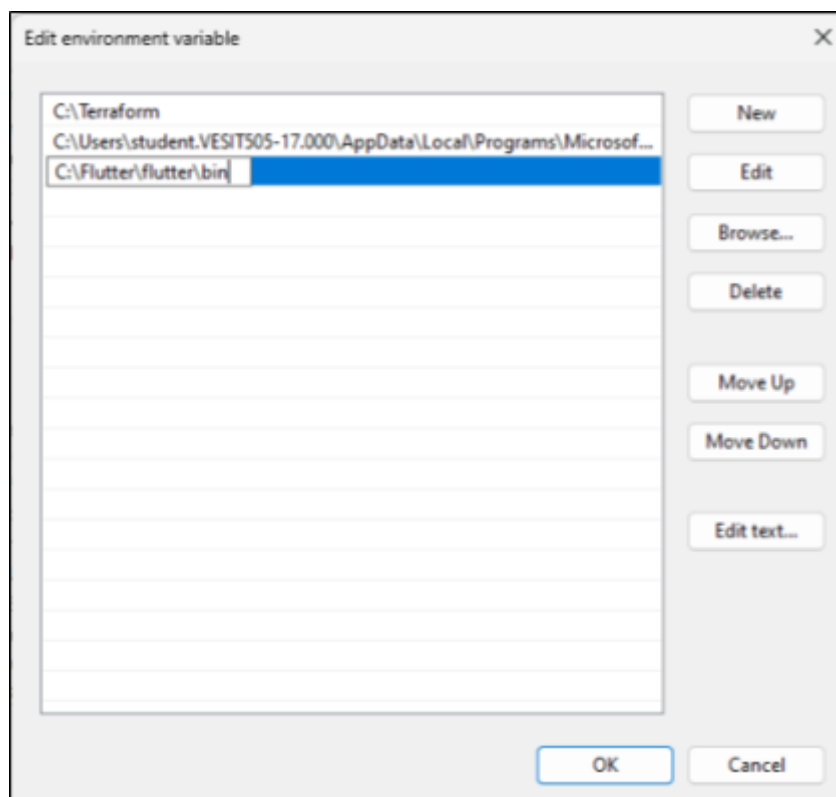
Step 4: Extract the zip file and copy paste the folder in C: Drive

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

Microsoft Windows [Version 10.0.19045.5371]
(c) Microsoft Corporation. All rights reserved.

C:\Users\User>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:
```

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

```
C:\Users\User>flutter doctor
Doctor summary (to see all details, run flutter doctor -v):
[V] Flutter (Channel stable, 3.27.4, on Microsoft Windows [Version 10.0.19045.5371], locale en-IN)
[V] 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.

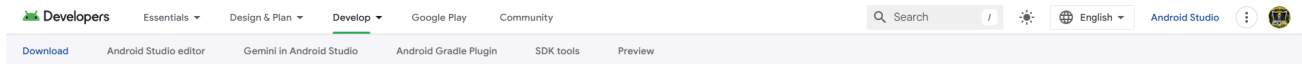
[X] Chrome - develop for the web (Cannot find Chrome executable at .\Google\Chrome\Application\chrome.exe)
    ! Cannot find Chrome. Try setting CHROME_EXECUTABLE to a Chrome executable.

[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)
[V] IntelliJ IDEA Ultimate Edition (version 2023.2)
[V] VS Code (version 1.96.4)
[V] Connected device (2 available)
[V] Network resources

! Doctor found issues in 4 categories.
```

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

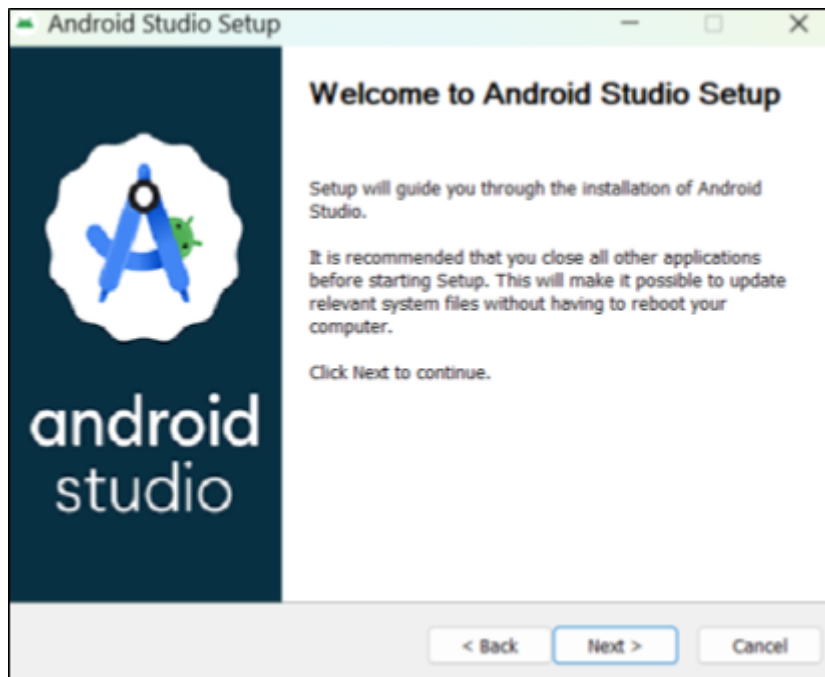


Android Studio downloads

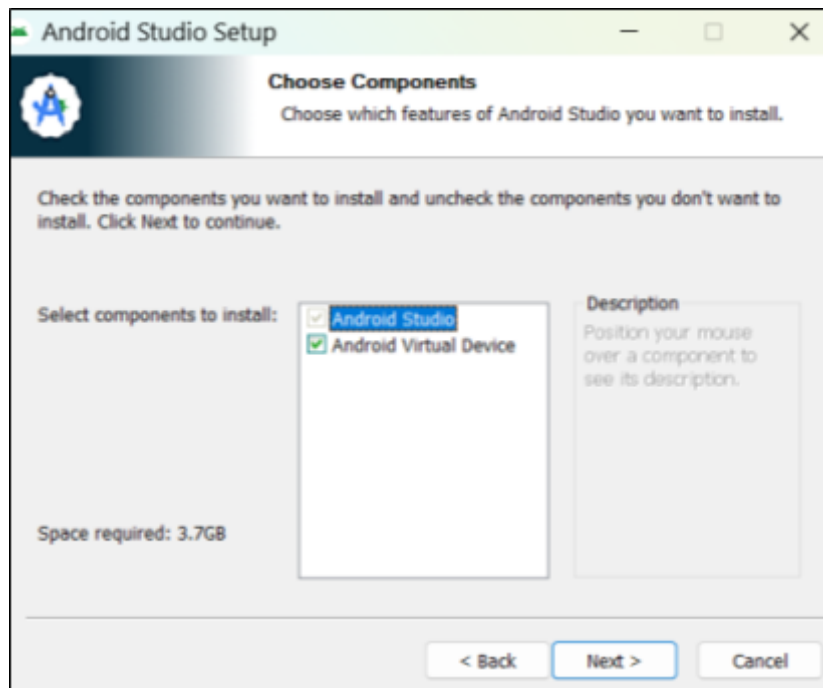
Download the latest version of Android Studio. For more information, see the [Android Studio release notes](#).

Platform	Android Studio package	Size	SHA-256 checksum
Windows (64-bit)	android-studio-2024.2.2.13-windows.exe Recommended	1.2 GB	7d93dd9ef3539f948f609b1968507b1f502bf6965d2d44bd38a17ff26cb5dd3e
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	acfbbe54dece8cf21f19b43510c7addcb9dde2824282f205fd1331be77d2e613
Mac (64-bit, ARM)	android-studio-2024.2.2.13-mac_arm.dmg	1.3 GB	688f8d007ee12f3f0c18f316179079dc4565f93d8d1e6a7dad80c4cfce35ed77
Linux (64-bit)	android-studio-2024.2.2.13-linux.tar.gz	1.3 GB	b77fe1ed4a7959bdaca7a8fd57461dbbf9a205eb23cc218ed828ed88e8b999cb5

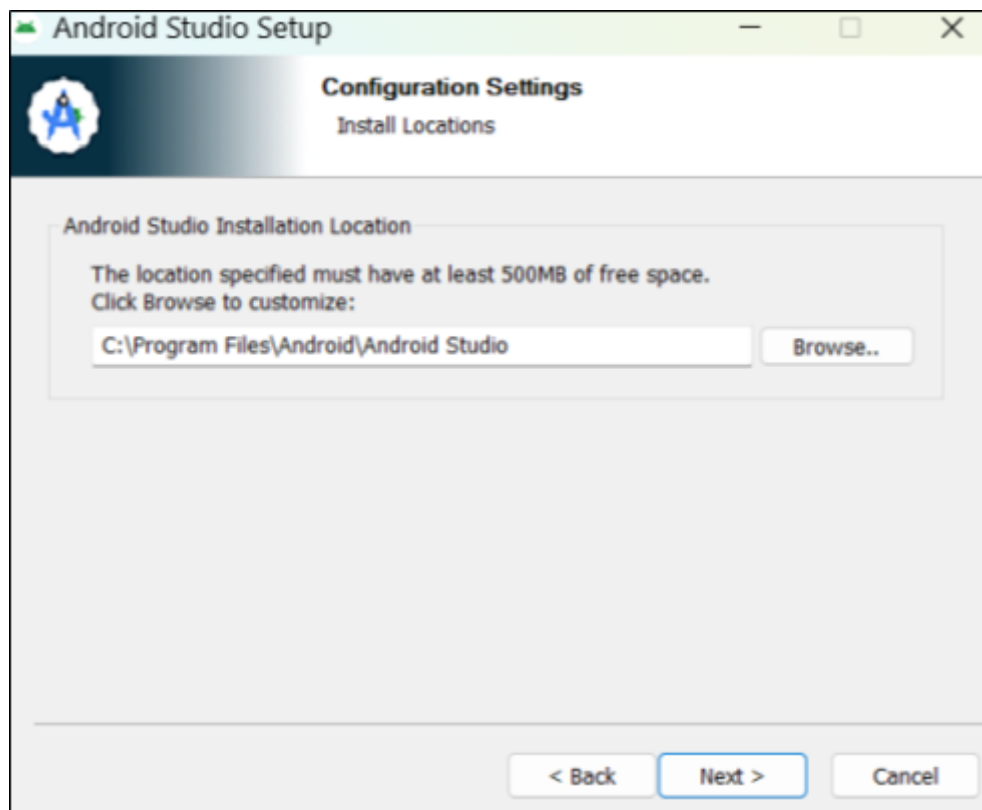
Step 8.1: - When the download is complete, open the .exe file and run it. You will get the following dialog box



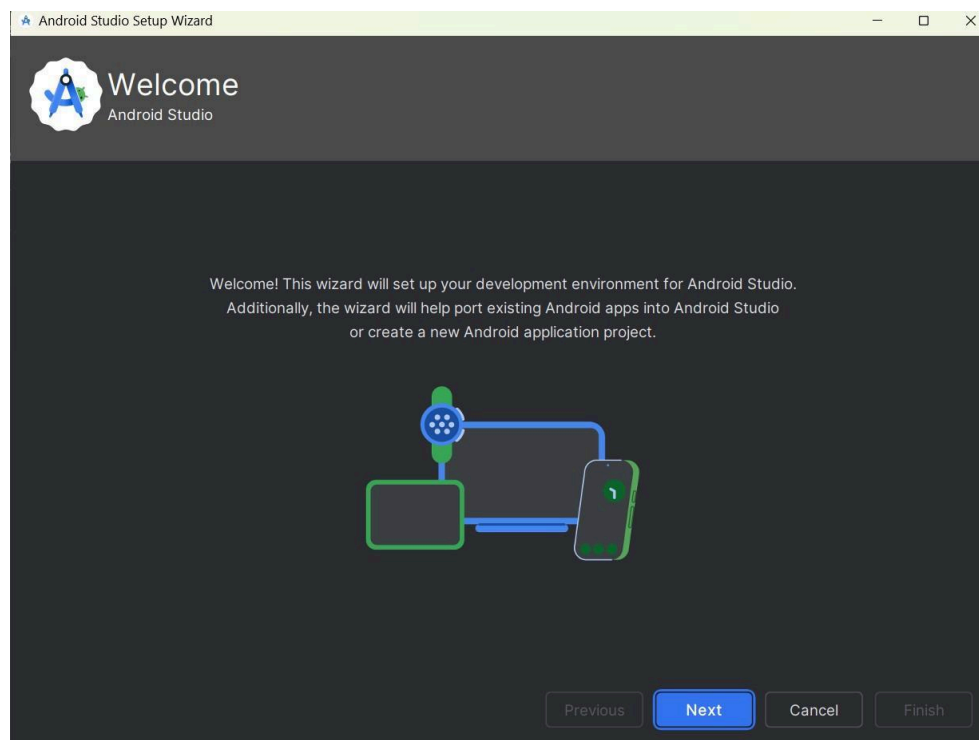
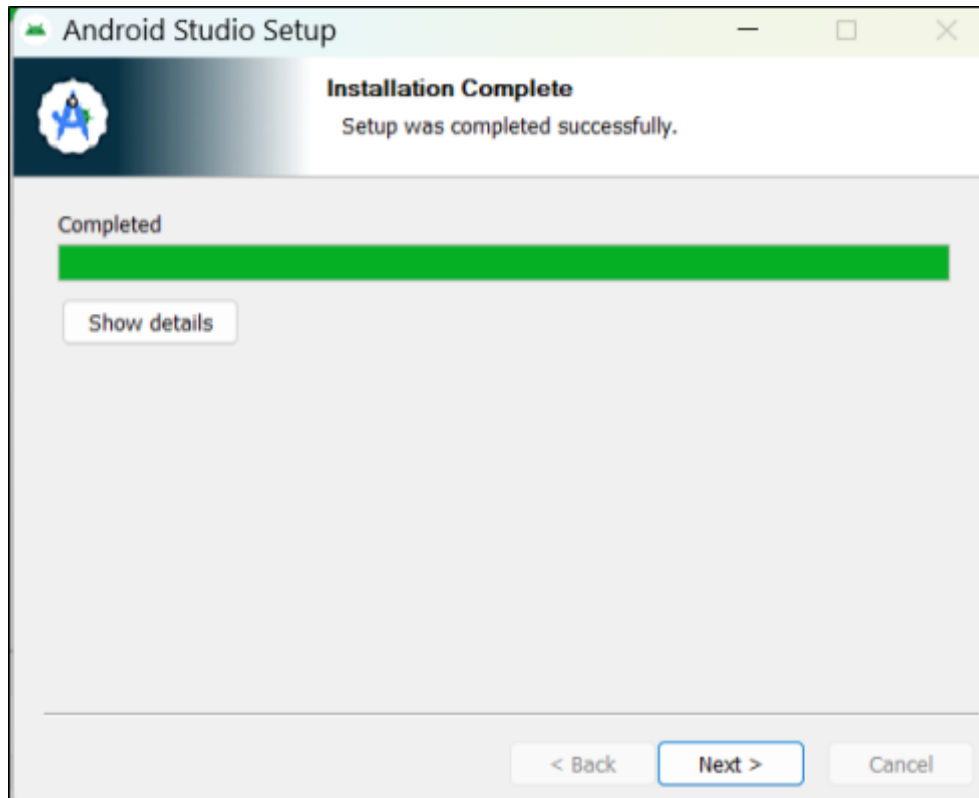
Step 8.2: - Select all the Checkboxes and Click on 'Next' Button.

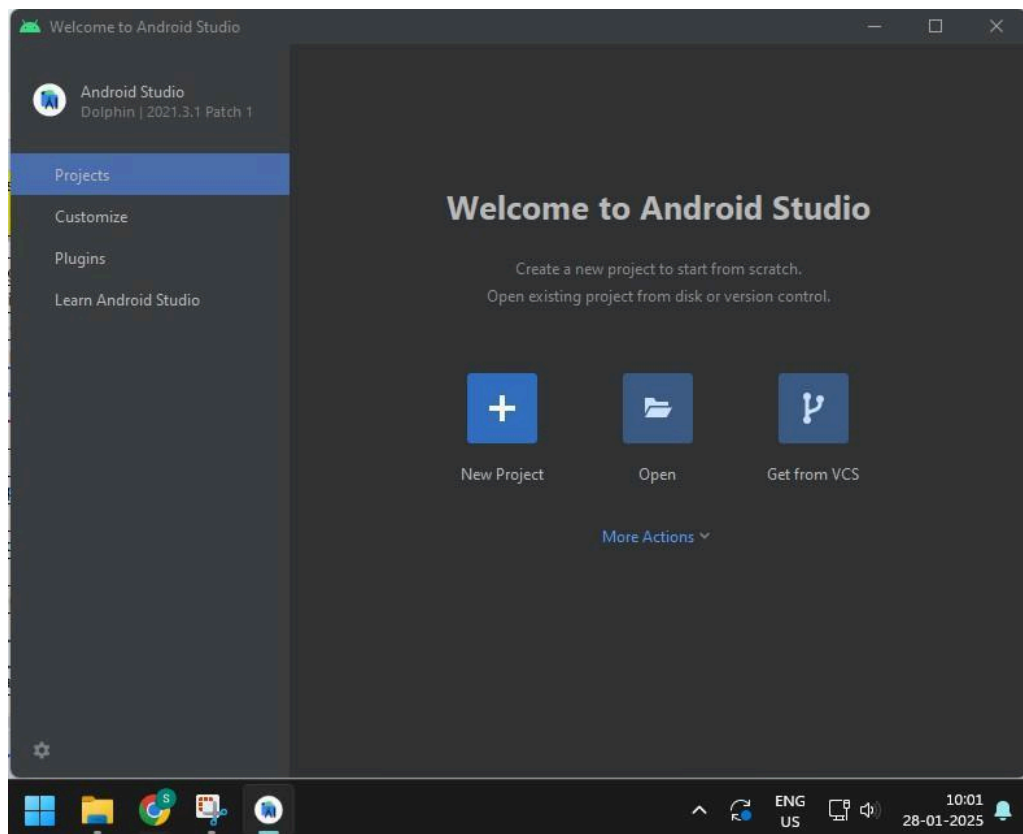
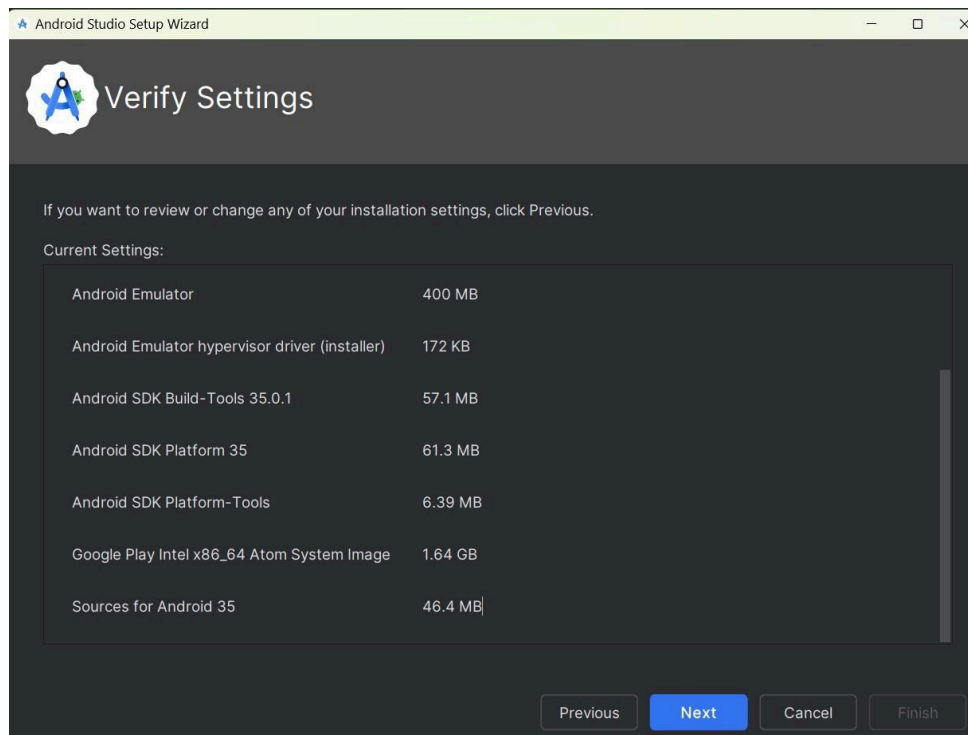


Step 8.3: - Change the destination as per your convenience and click on 'Next' Button.

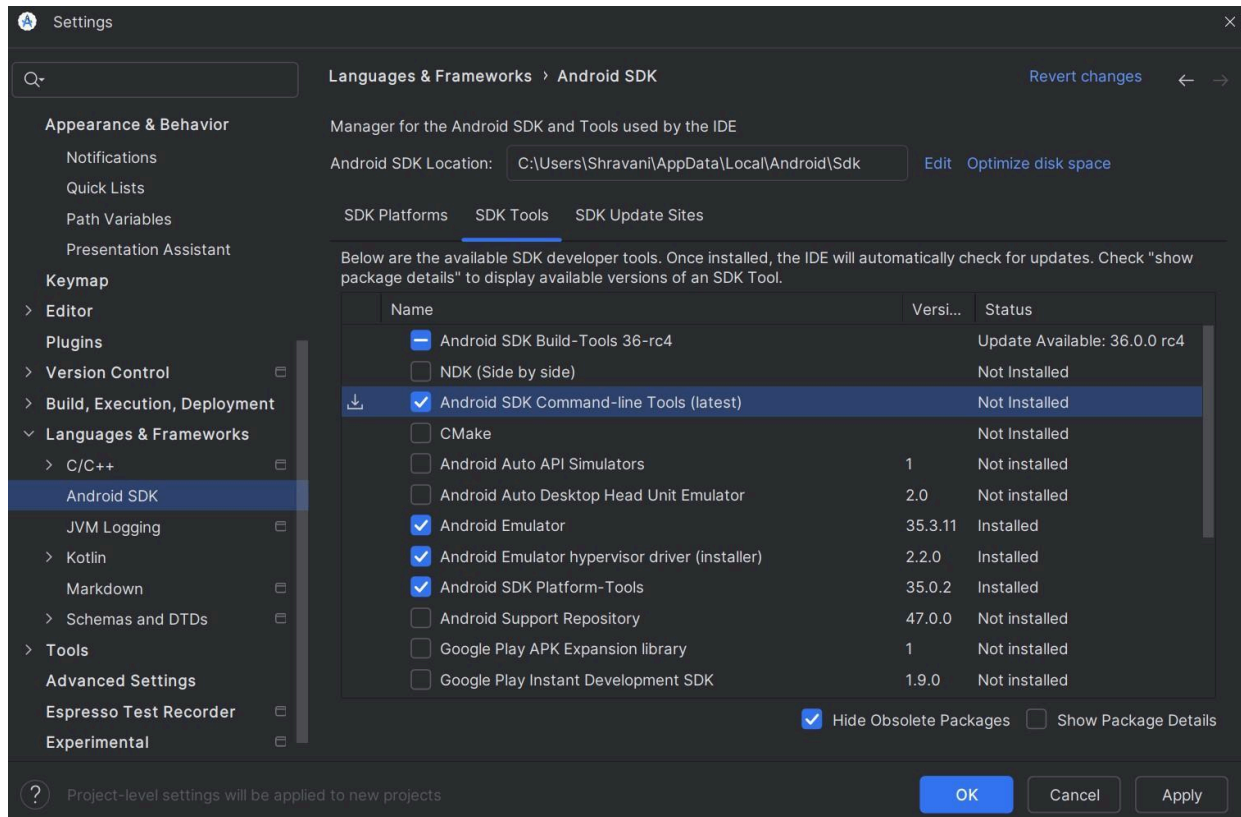


Step 8.4: - Follow the steps of the installation wizard. Once the installation wizard completes, you will get the following screen.





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\User>flutter doctor --android-licenses
[=====] 100% Computing updates...
5 of 7 SDK package licenses not accepted.
Review licenses that have not been accepted (y/N)? y

1/5: License android-googletv-license:
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Terms and Conditions

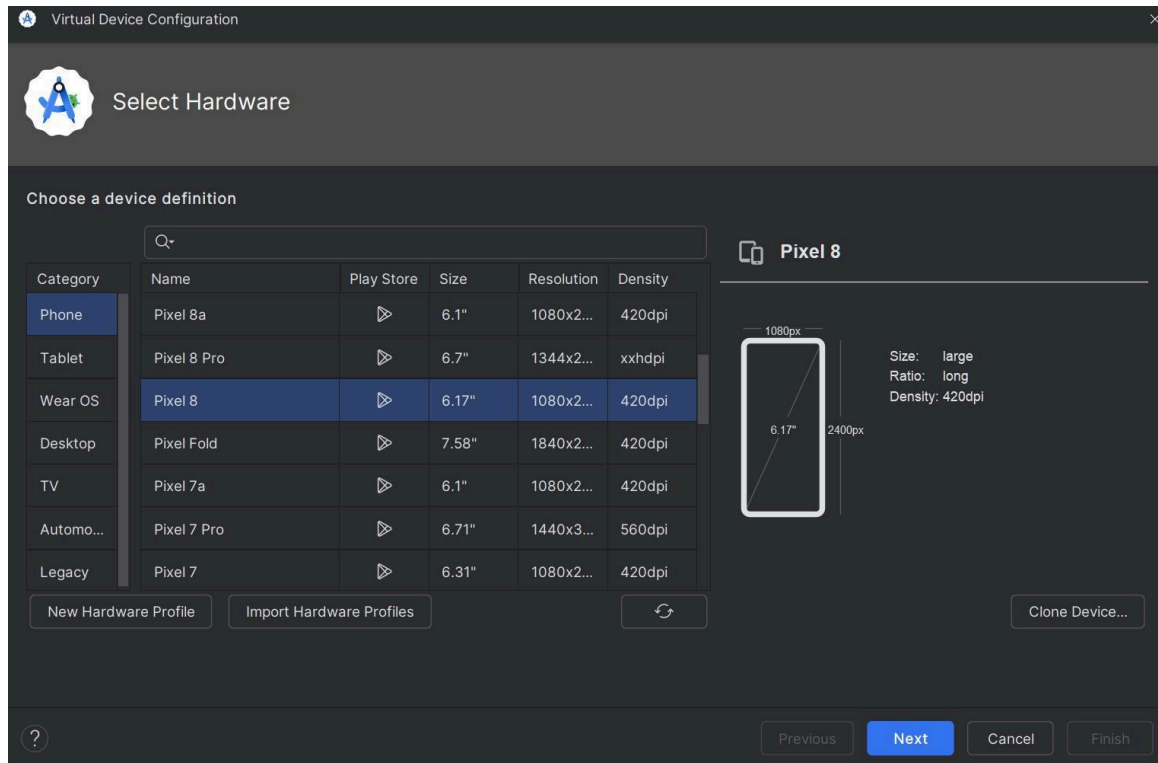
This is the Google TV Add-on for the Android Software Development Kit License Agreement.

1. Introduction

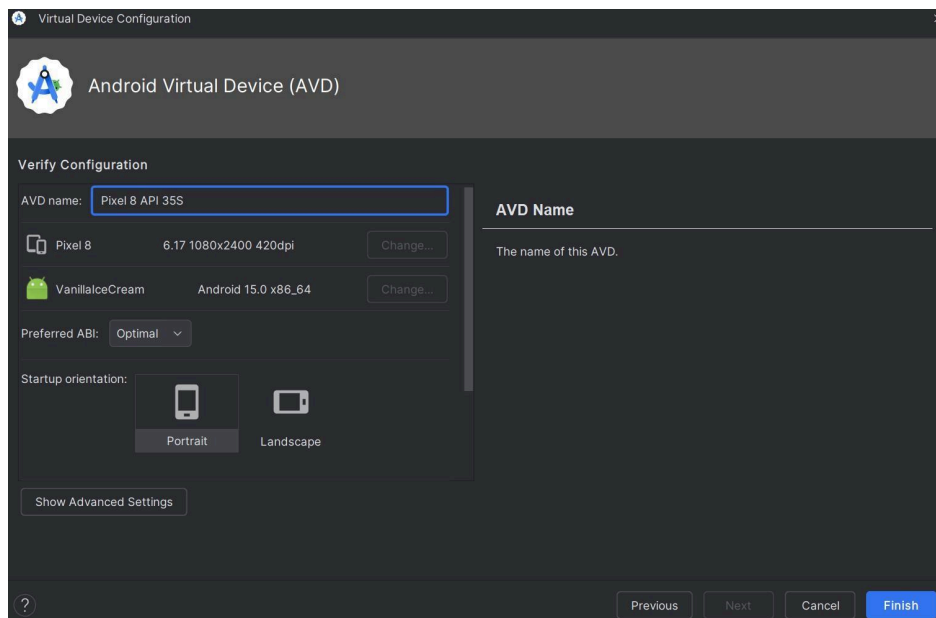
C:\Users\User>flutter doctor
Doctor summary (to see all details, run flutter doctor -v):
[V] Flutter (Channel stable, 3.27.4, on Microsoft Windows [Version 10.0.19045.5371], locale en-IN)
[V] Windows Version (Installed version of Windows is version 10 or higher)
[!] Android toolchain - develop for Android devices (Android SDK version 35.0.1)
    ! Some Android licenses not accepted. To resolve this, run: flutter doctor --android-licenses
[X] Chrome - develop for the web (Cannot find Chrome executable at .\Google\Chrome\Application\chrome.exe)
    ! Cannot find Chrome. Try setting CHROME_EXECUTABLE to a Chrome executable.
[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
[V] Android Studio (version 2024.2)
[V] IntelliJ IDEA Ultimate Edition (version 2023.2)
[V] VS Code (version 1.96.4)
[V] Connected device (2 available)
[V] Network resources

! Doctor found issues in 3 categories.
```

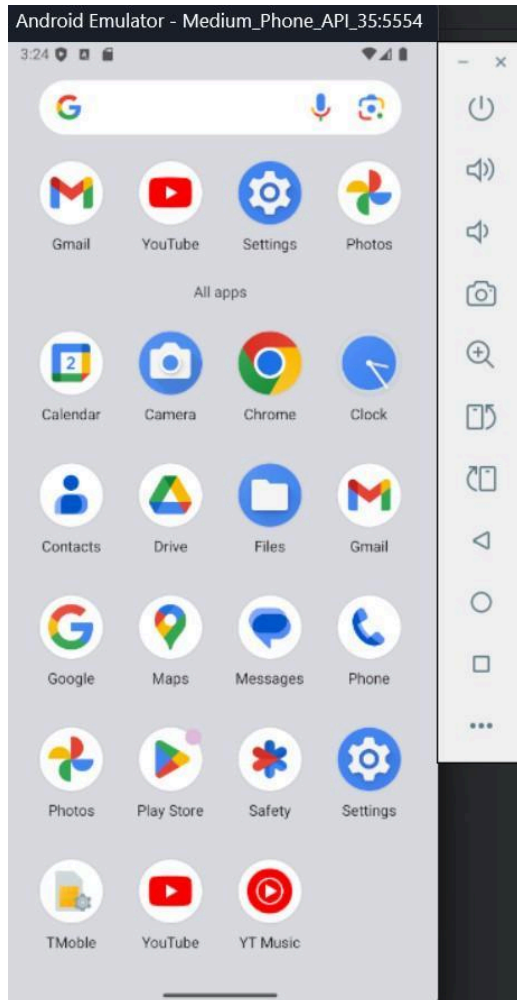
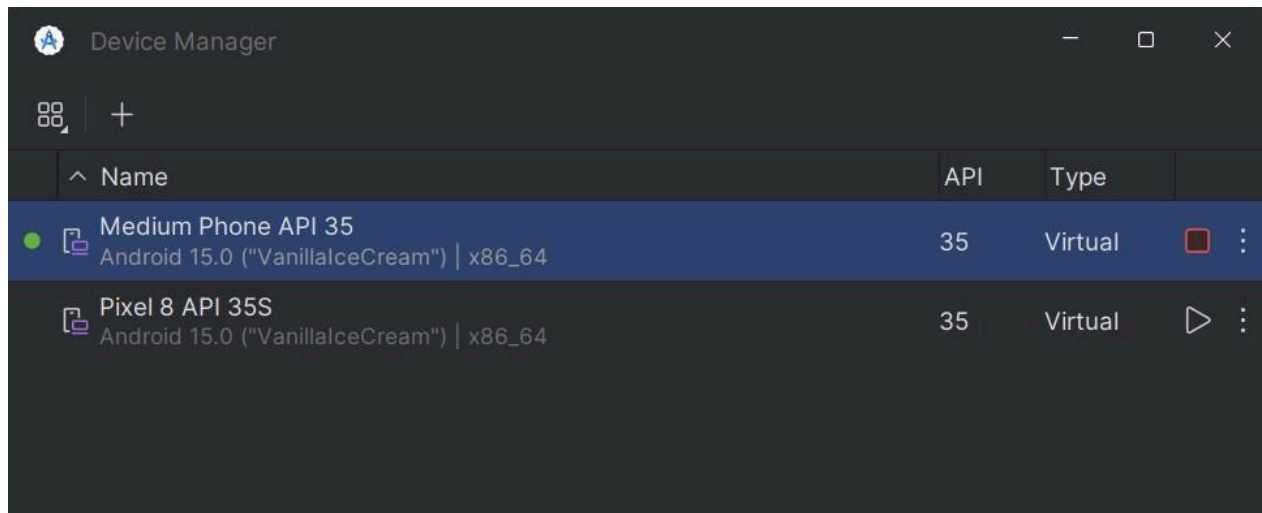

Step 10: - Next, you need to set up an Android emulator. It is responsible for running and testing the Flutter application



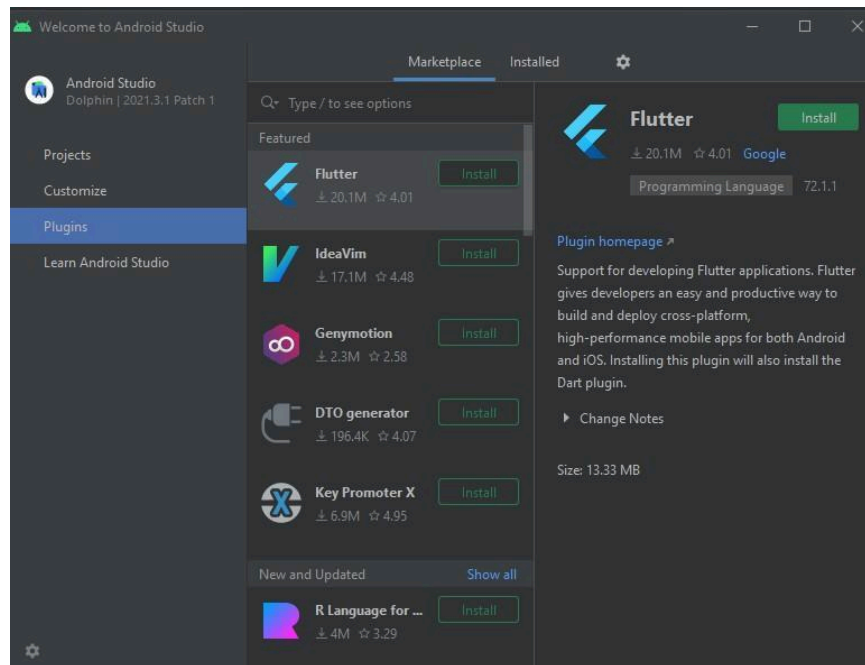
Step 10.1: - Open Android Studio and go to Tools > AVD Manager. Create a new virtual device



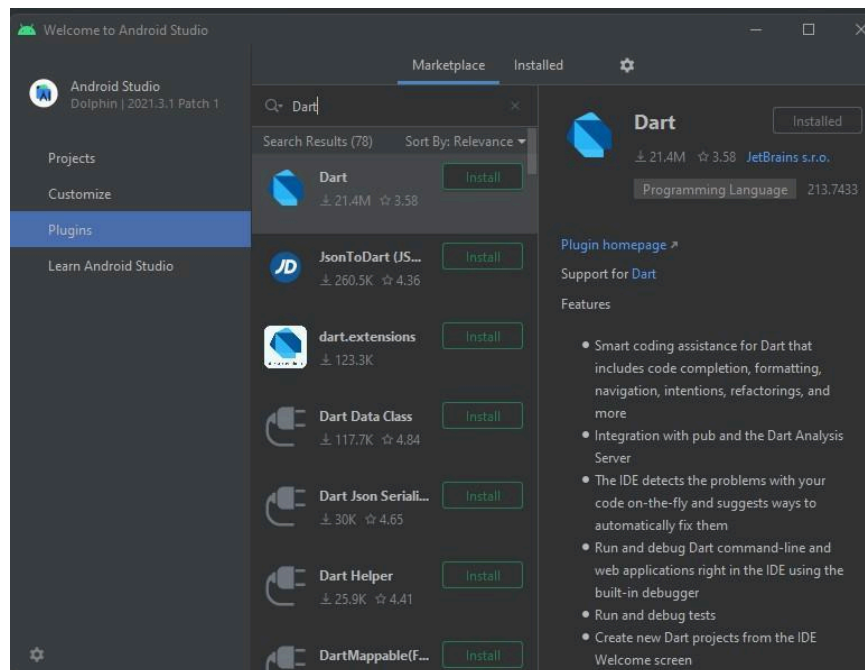
Step 10.2: - Click on the icon pointed into the red color rectangle. The Android emulator displayed as below screen



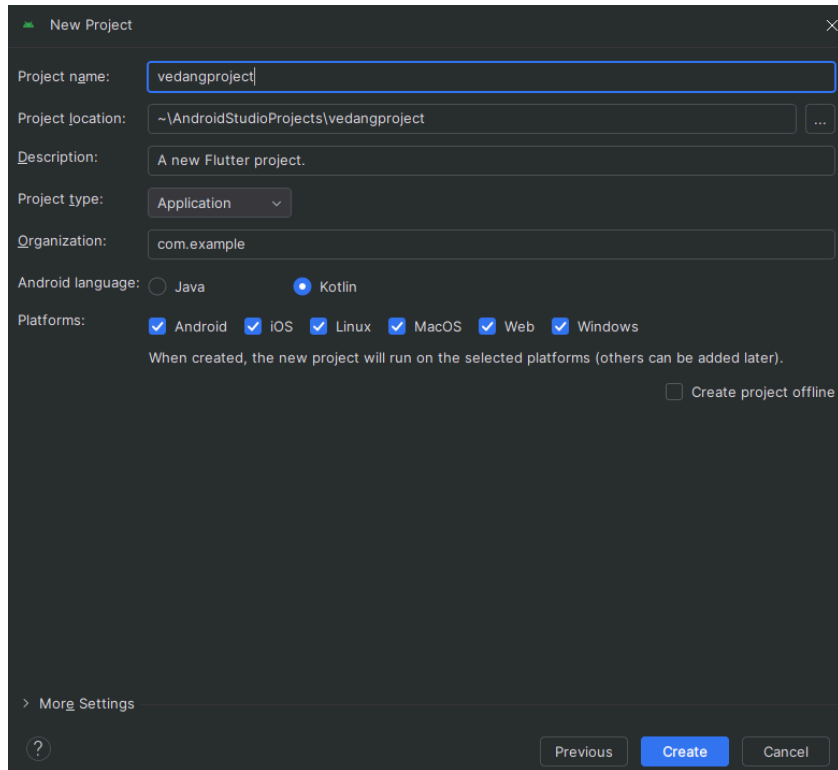
Step 11: - Now, install Flutter and Dart plugin for building Flutter application in Android Studio. These plugins provide a template to create a Flutter application, give an option to run and debug Flutter application in the Android Studio itself



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 select project name , location and click next



The 'New Project' dialog in Android Studio is shown. The 'Project name' field contains 'vedangproject'. The 'Project location' field shows the path '~\AndroidStudioProjects\vedangproject'. The 'Description' field contains 'A new Flutter project.'. The 'Project type' is set to 'Application'. The 'Organization' field contains 'com.example'. Under 'Android language', 'Kotlin' is selected. Under 'Platforms', 'Android', 'iOS', 'Linux', 'MacOS', 'Web', and 'Windows' are all checked. A note states: 'When created, the new project will run on the selected platforms (others can be added later)'. There is an unchecked checkbox for 'Create project offline'. At the bottom, there is a link to '> More Settings', a help icon, and three buttons: 'Previous', 'Create', and 'Cancel'.

