Name - Sejal Maurya **Div -D15A**

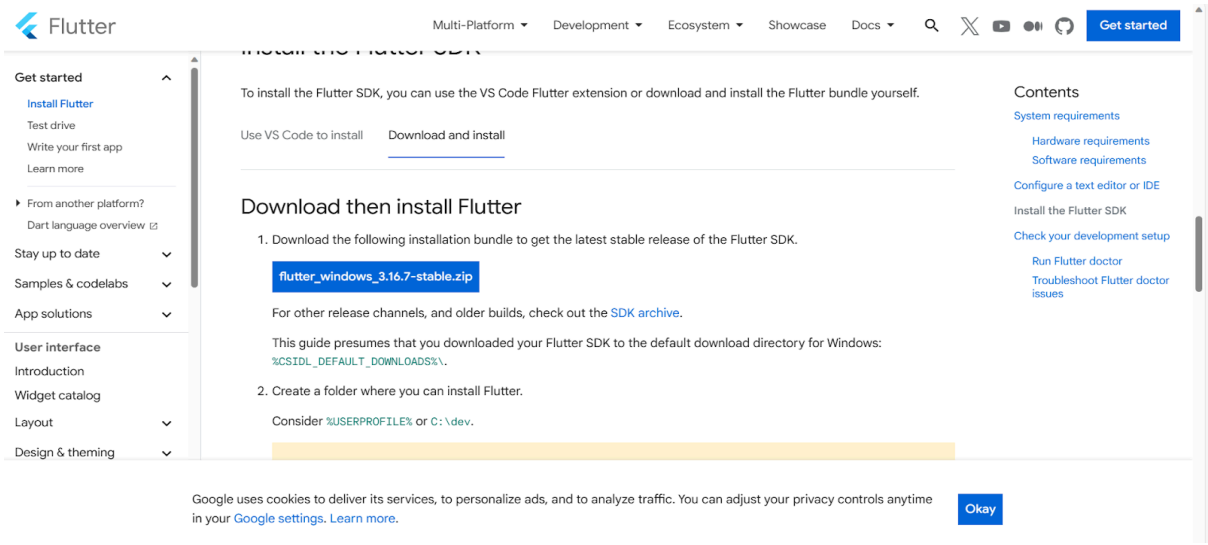
Roll No - 35 **Batch -B**

EXPERIMENT NO - 01

Installation and Configuration of Flutter Environment.

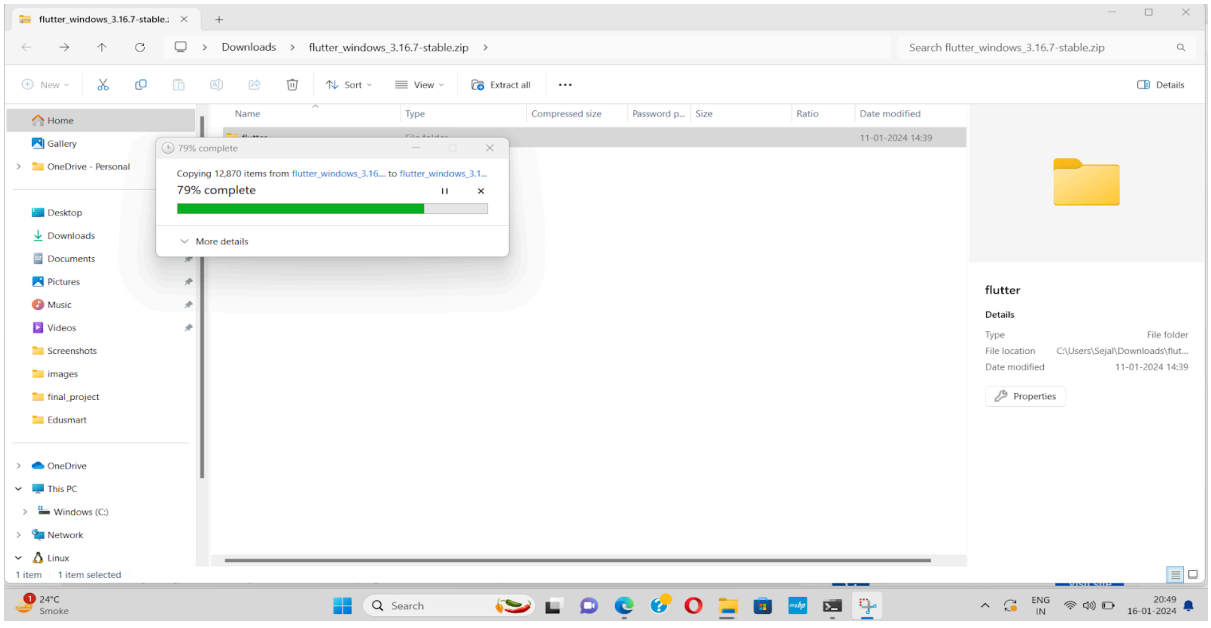
Steps

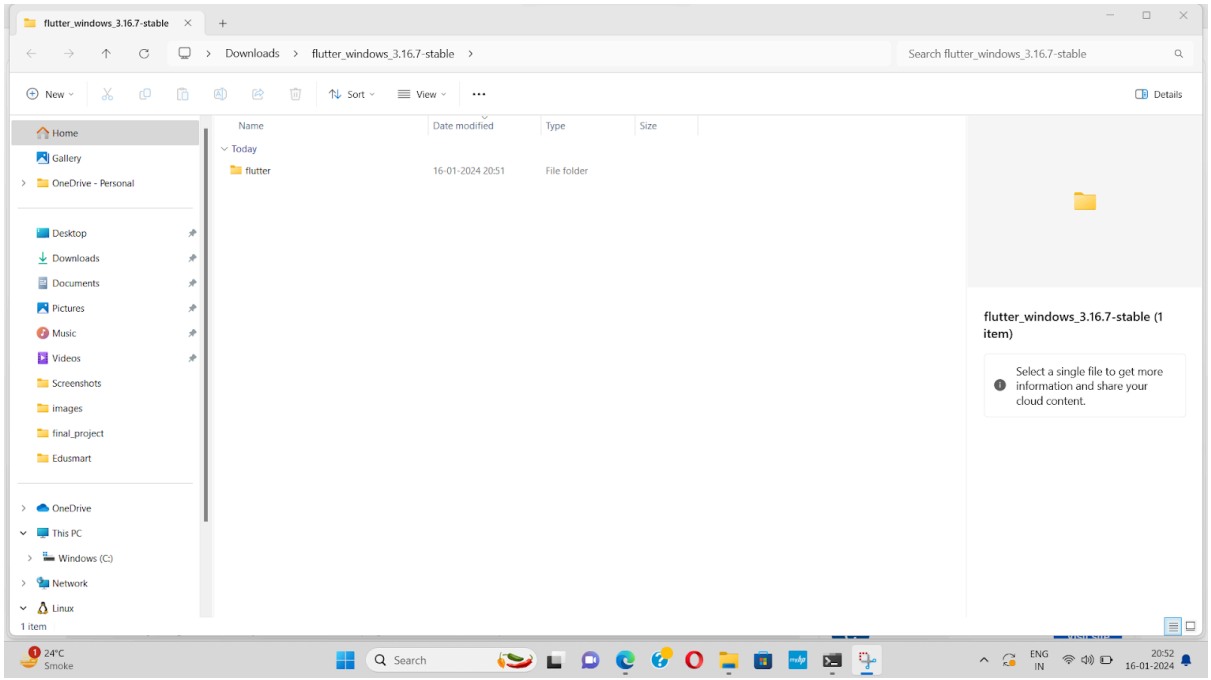
Step 1: Download the installation bundle of the Flutter Software Development Kit for windows.

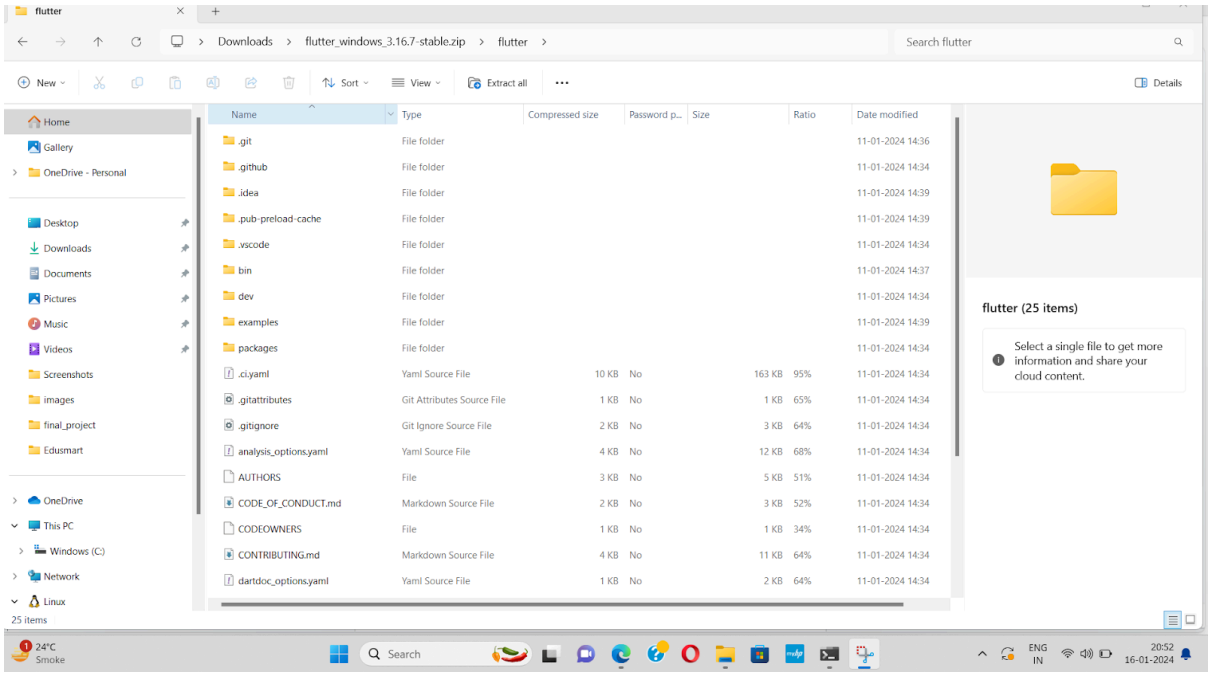


When your download is complete, extract the zip file and place it in the desired installation folder or location, for example, C: /Flutter.

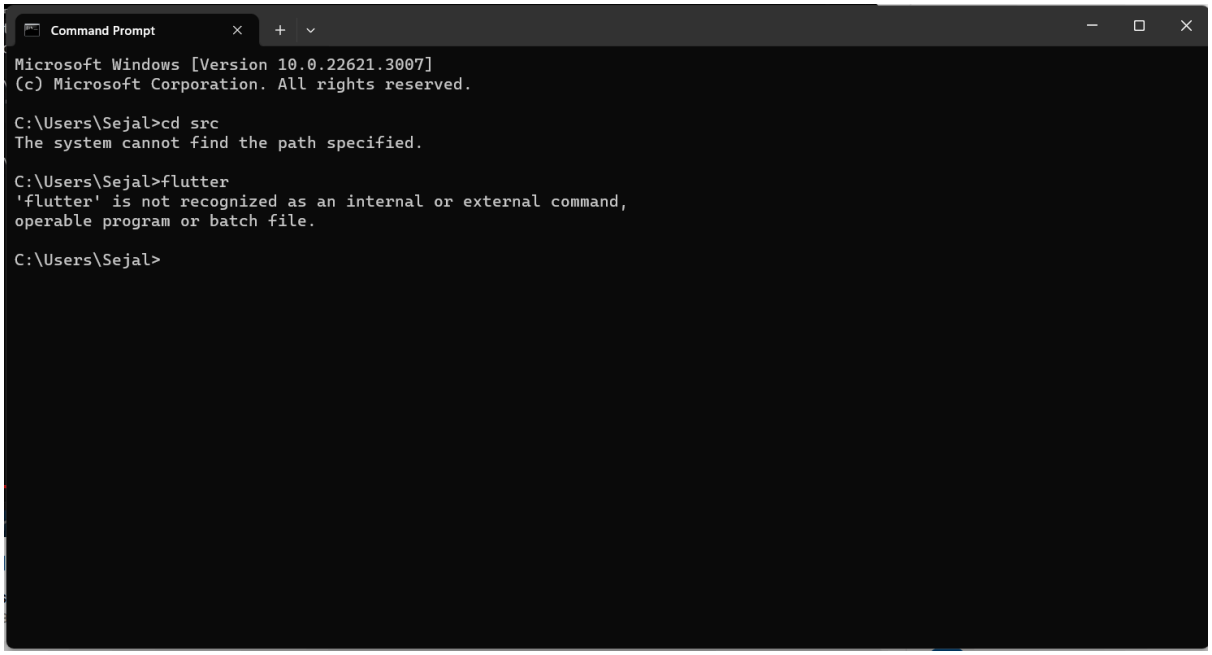
After unzip the file




flutter_windows_3.16.7-stable
Downloads
flutter_windows_3.16.7-stable
Search flutter_windows_3.16.7-stable
New
Sort
View
Details
Home
Gallery
OneDrive - Personal
Desktop
Downloads
Documents
Pictures
Music
Videos
Screenshots
images
final_project
Edusmart
OneDrive
This PC
Windows (C:)
Network
Linux
1 item
Name
Date modified
Type
Size
Today
flutter
16-01-2024 20:51
File folder
flutter_windows_3.16.7-stable (1 item)
Select a single file to get more information and share your cloud content.
24°C
Smoke
Search
ENG
IN
20:52
16-01-2024

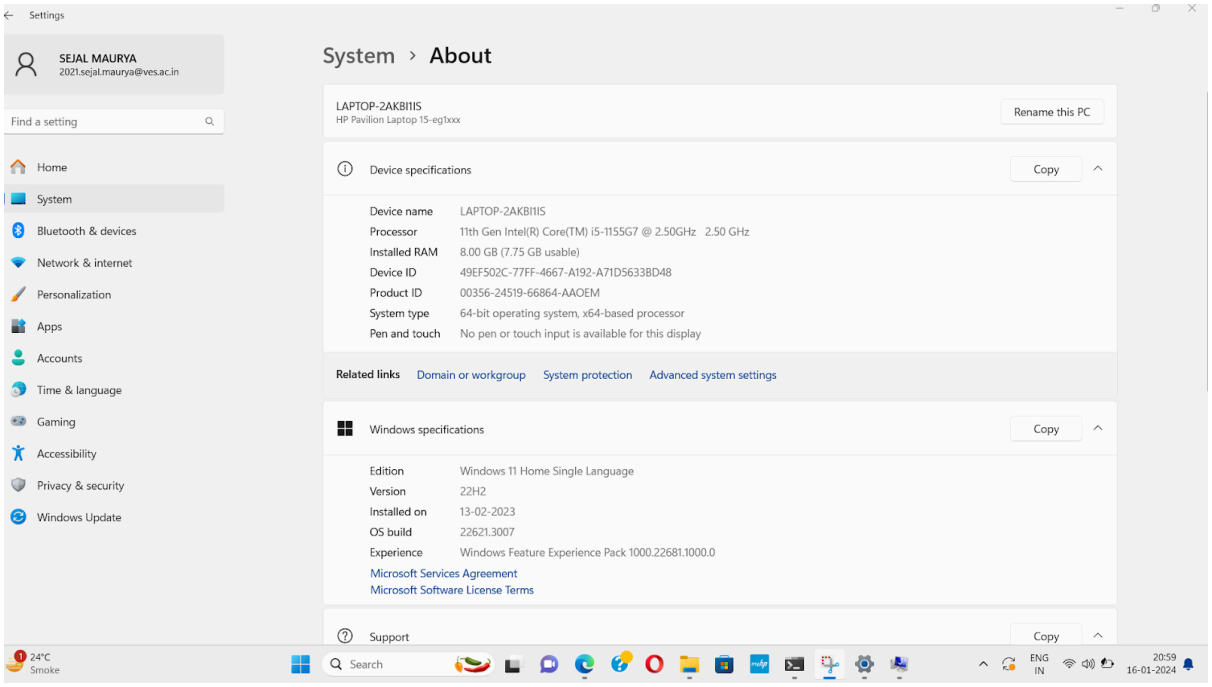

flutter
Downloads
flutter_windows_3.16.7-stable.zip
flutter
Search flutter
New
Sort
View
Extract all
Details
Home
Gallery
OneDrive - Personal
Desktop
Downloads
Documents
Pictures
Music
Videos
Screenshots
images
final_project
Edusmart
OneDrive
This PC
Windows (C:)
Network
Linux
25 items
Name
Type
Compressed size
Password p...
Size
Ratio
Date modified
.git
File folder
11-01-2024 14:36
.github
File folder
11-01-2024 14:34
.idea
File folder
11-01-2024 14:39
.pub-preload-cache
File folder
11-01-2024 14:39
.vscode
File folder
11-01-2024 14:34
bin
File folder
11-01-2024 14:37
dev
File folder
11-01-2024 14:34
examples
File folder
11-01-2024 14:39
packages
File folder
11-01-2024 14:34
.ci.yaml
Yaml Source File
10 KB
No
163 KB
95%
11-01-2024 14:34
.gitattributes
Git Attributes Source File
1 KB
No
1 KB
65%
11-01-2024 14:34
.gitignore
Git Ignore Source File
2 KB
No
3 KB
64%
11-01-2024 14:34
analysis_options.yaml
Yaml Source File
4 KB
No
12 KB
68%
11-01-2024 14:34
AUTHORS
File
3 KB
No
5 KB
51%
11-01-2024 14:34
CODE_OF_CONDUCT.md
Markdown Source File
2 KB
No
3 KB
52%
11-01-2024 14:34
CODEOWNERS
File
1 KB
No
1 KB
34%
11-01-2024 14:34
CONTRIBUTING.md
Markdown Source File
4 KB
No
11 KB
64%
11-01-2024 14:34
dartdoc_options.yaml
Yaml Source File
1 KB
No
2 KB
64%
11-01-2024 14:34
flutter (25 items)
Select a single file to get more information and share your cloud content.
24°C
Smoke
Search
ENG
IN
20:52
16-01-2024

Now run the flutter command

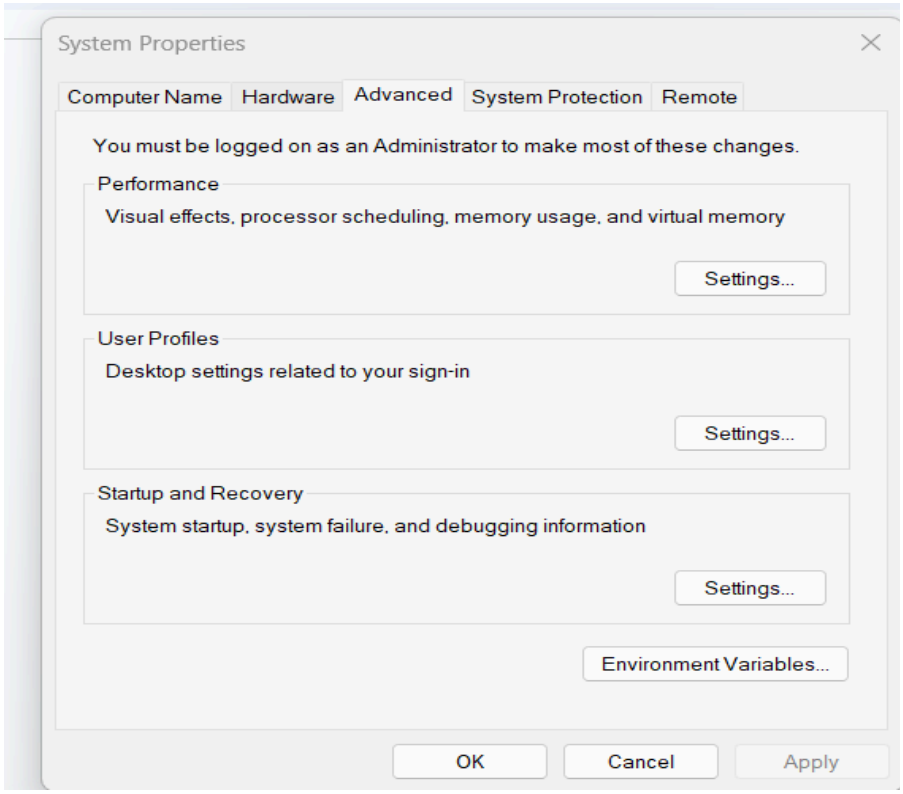


Set the system and user variable

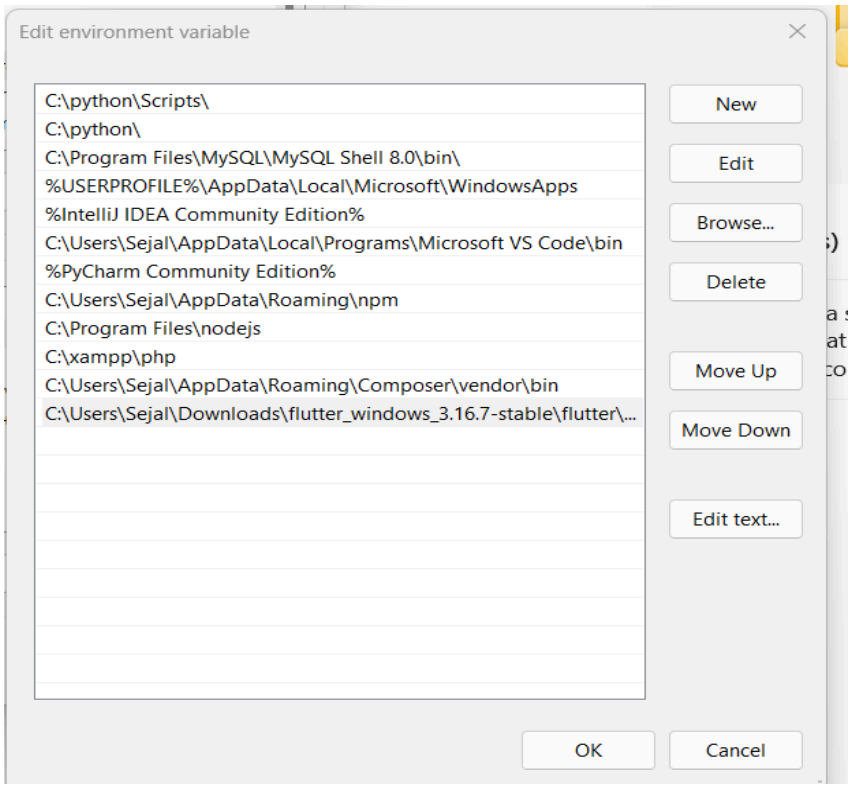
So here we have to Go to advanced system settings



Then select environment variable



Enter the path



Now, run the $ flutter command in command prompt.

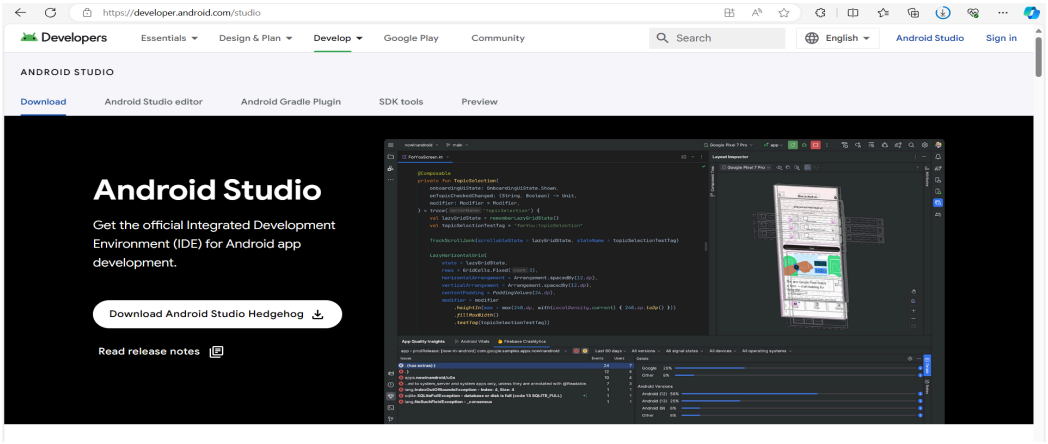
```
C:\Users\Sejal>flutter
Manage your Flutter app development.

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:
```

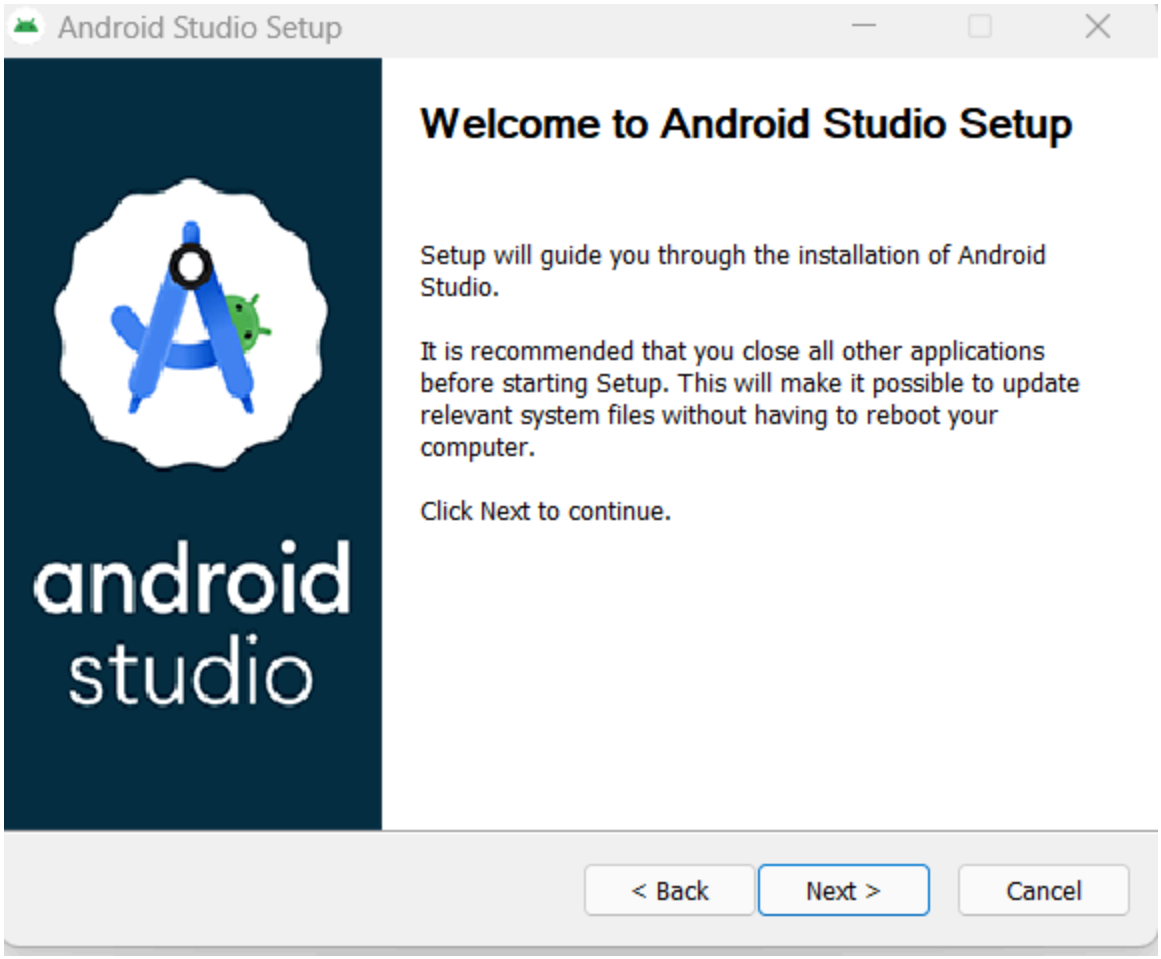
```
Microsoft Windows [Version 10.0.22621.3007]
(c) Microsoft Corporation. All rights reserved.

C:\Users\Sejal>dart pub cache repair
  ╔═══════════════════════════════════════════════════════════════════════╗
  ║ The Dart tool uses Google Analytics to report feature usage statistics ║
  ║ and to send basic crash reports. This data is used to help improve the ║
  ║ Dart platform and tools over time.                                    ║
  ║                                                                       ║
  ║ To disable reporting of analytics, run:                               ║
  ║                                                                       ║
  ║   dart --disable-analytics                                            ║
  ║                                                                       ║
  ╚═══════════════════════════════════════════════════════════════════════╝

^CTerminate batch job (Y/N)?
^CThe syntax of the command is incorrect.

C:\Users\Sejal>dart pub cache repair
Reinstalled 18 packages.

C:\Users\Sejal>flutter doctor
Found an existing Pub cache at C:\Users\Sejal\AppData\Local\Pub\Cache.
It can be repaired by running `dart pub cache repair`.
It can be reset by running `dart pub cache clean`.
```

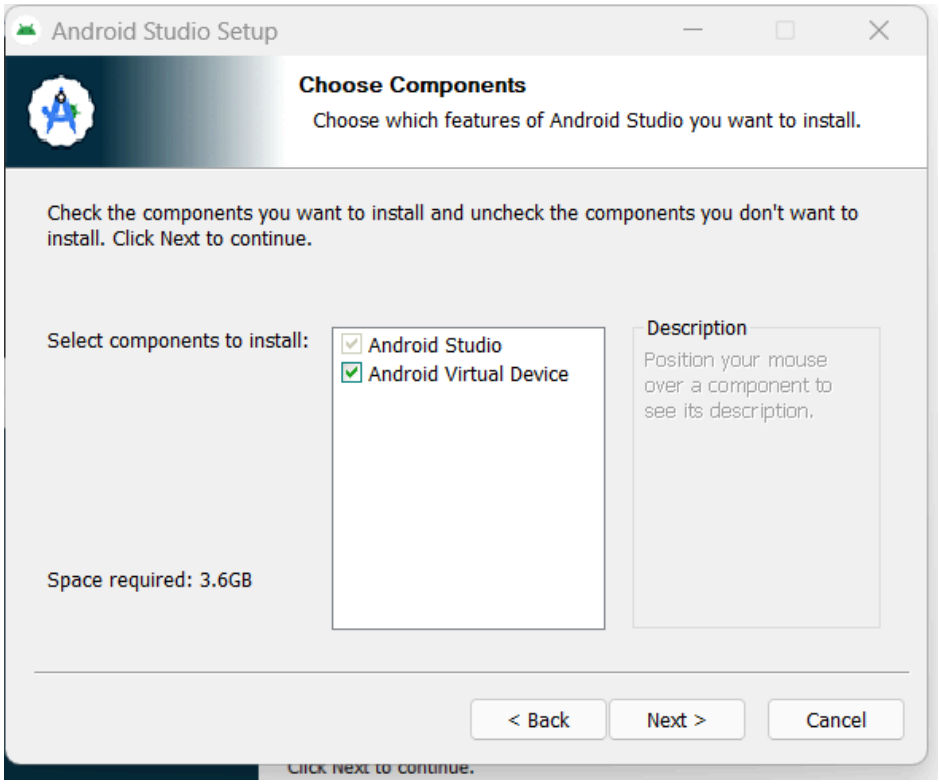
```
Command Prompt - flutter p
Microsoft Windows [Version 10.0.22621.3007]
(c) Microsoft Corporation. All rights reserved.

C:\Users\Sejal>flutter pub cache repair
Found an existing Pub cache at C:\Users\Sejal\AppData\Local\Pub\Cache.
It can be repaired by running 'dart pub cache repair'.
It can be reset by running 'dart pub cache clean'.
Reinstalled 151 packages.

C:\Users\Sejal>flutter doctor
Doctor summary (to see all details, run flutter doctor -v):
[√] Flutter (Channel stable, 3.16.7, on Microsoft Windows [Version 10.0.22621.3007], 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/docs/get-started/install/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 1.85.1)
[√] Connected device (3 available)
[√] Network resources

! Doctor found issues in 3 categories.

C:\Users\Sejal>
```

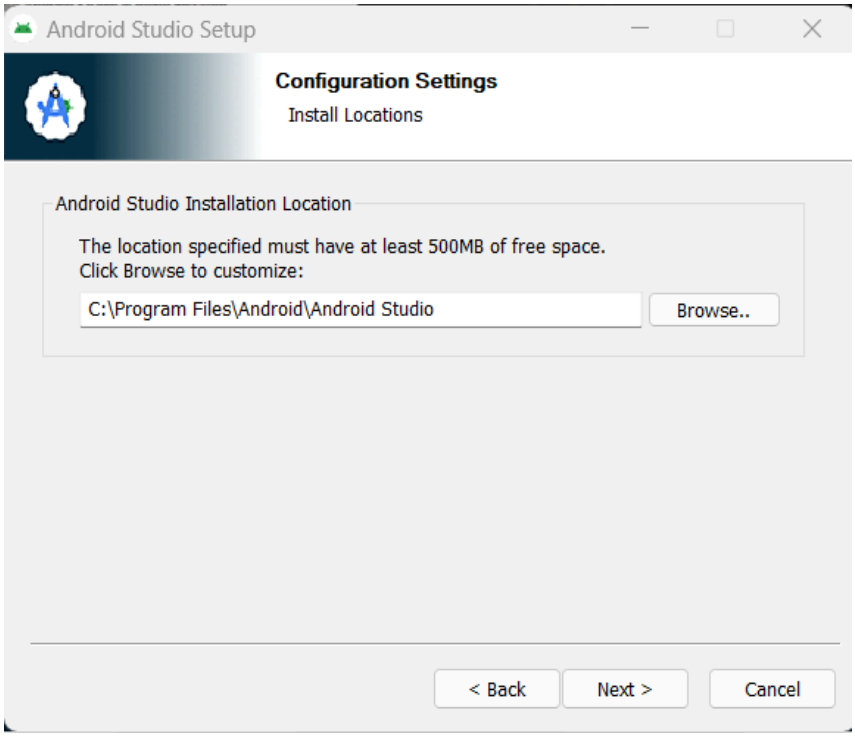
```
Command Prompt - flutter cr
Microsoft Windows [Version 10.0.22621.3007]
(c) Microsoft Corporation. All rights reserved.

C:\Users\Sejal>cd desktop

C:\Users\Sejal\Desktop>cd flutter

C:\Users\Sejal\Desktop\flutter>flutter create ganesh
Creating project ganesh...
Found an existing Pub cache at C:\Users\Sejal\AppData\Local\Pub\Cache.
It can be repaired by running `dart pub cache repair`.
It can be reset by running `dart pub cache clean`.
Resolving dependencies in ganesh... (1.9s)
Got dependencies in ganesh.
Wrote 129 files.

All done!
You can find general documentation for Flutter at: https://docs.flutter.dev/
Detailed API documentation is available at: https://api.flutter.dev/
If you prefer video documentation, consider: https://www.youtube.com/c/flutterdev

In order to run your application, type:

  $ cd ganesh
  $ flutter run

Your application code is in ganesh\lib\main.dart.


C:\Users\Sejal\Desktop\flutter>
```

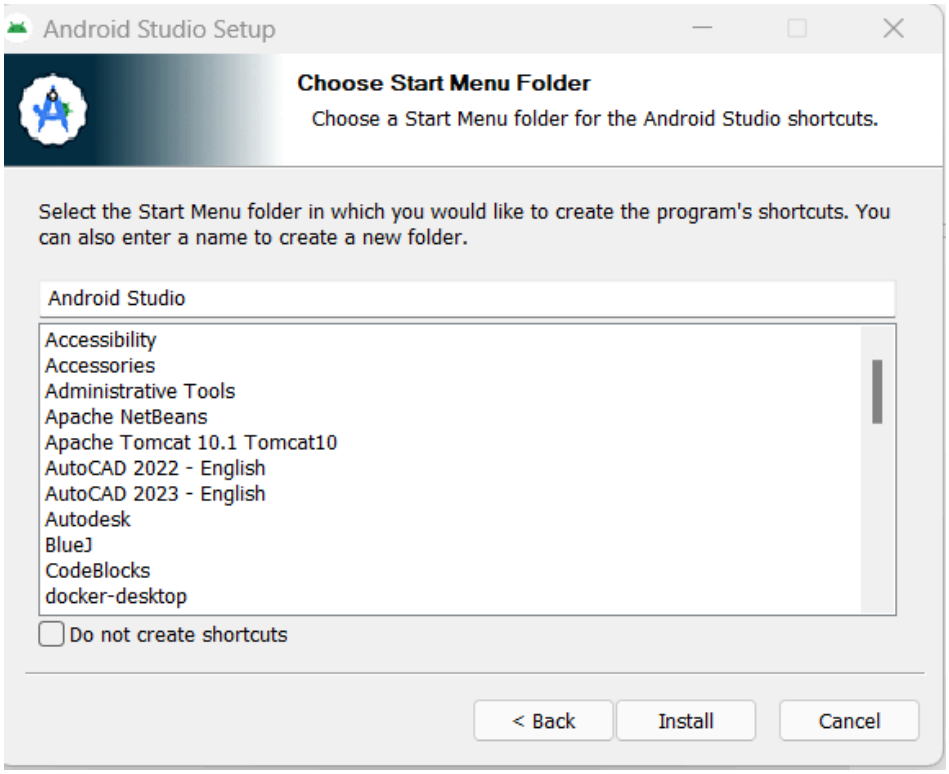
Now download the android studio

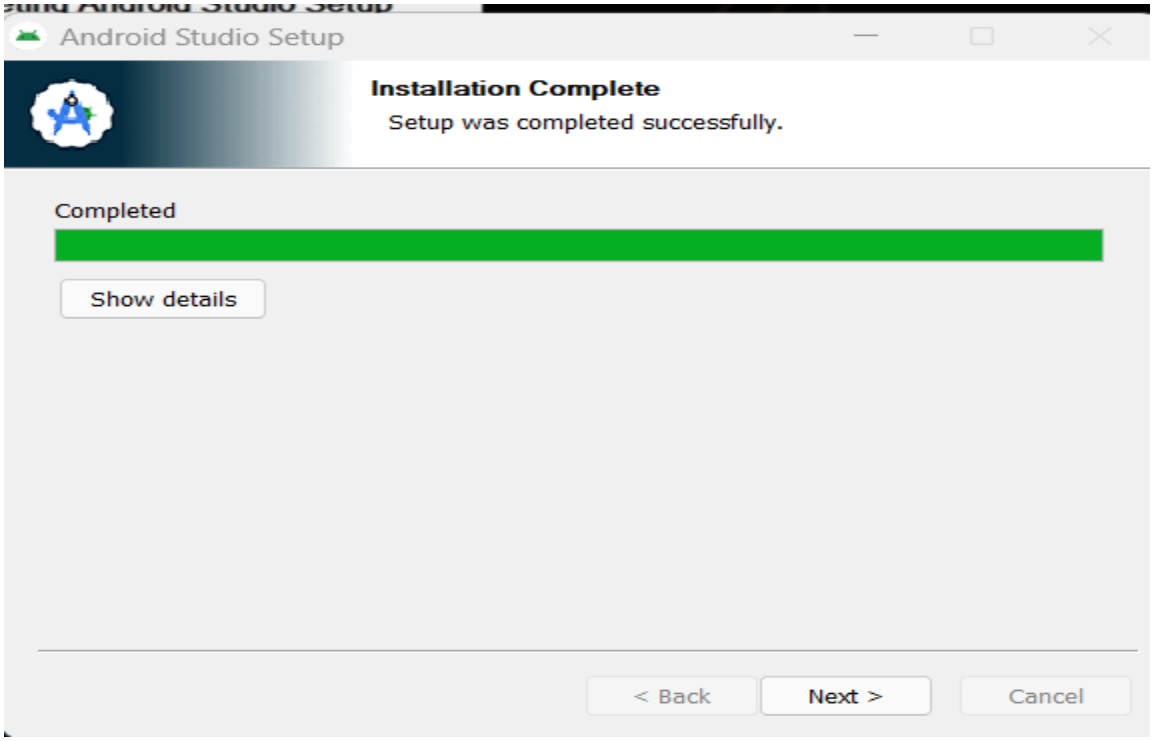


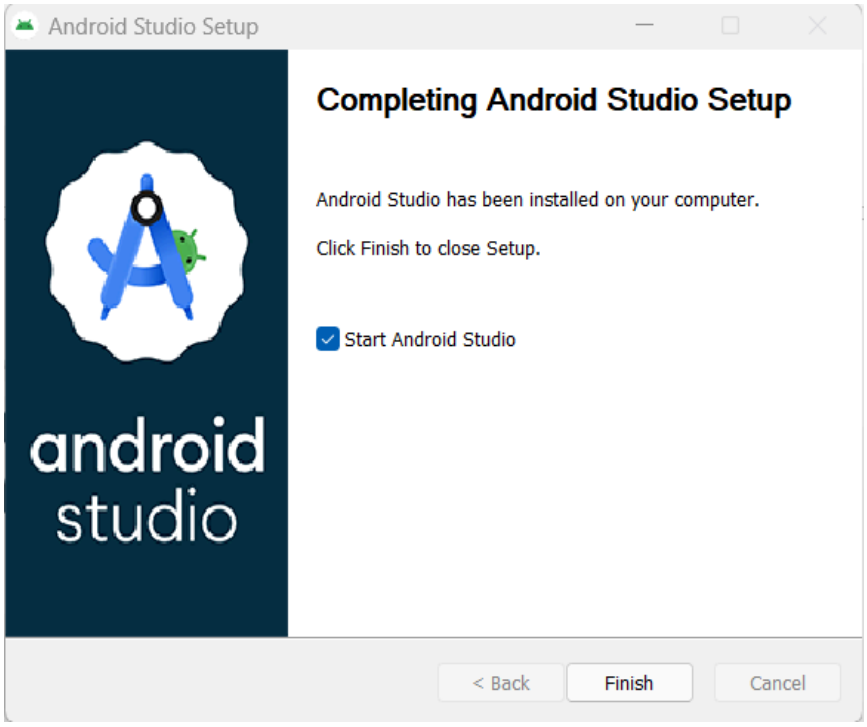

Android Studio Setup
Welcome to Android Studio Setup
Setup will guide you through the installation of Android Studio.
It is recommended that you close all other applications before starting Setup. This will make it possible to update relevant system files without having to reboot your computer.
Click Next to continue.
android studio
< Back
Next >
Cancel

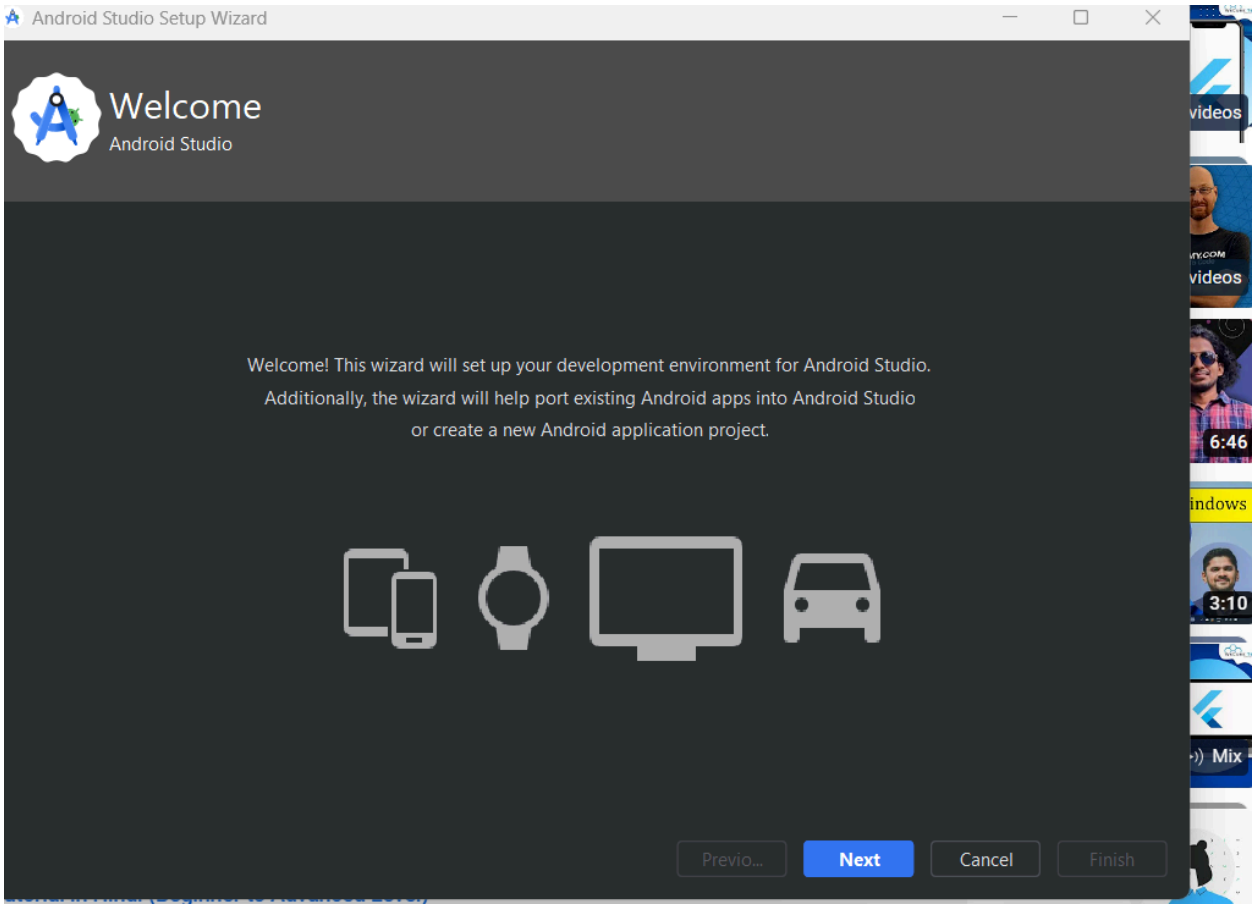

Android Studio Setup
Choose Components
Choose which features of Android Studio you want to install.
Check the components you want to install and uncheck the components you don't want to install. Click Next to continue.
Select components to install:
Android Studio
Android Virtual Device
Description
Position your mouse over a component to see its description.
Space required: 3.6GB
< Back
Next >
Cancel

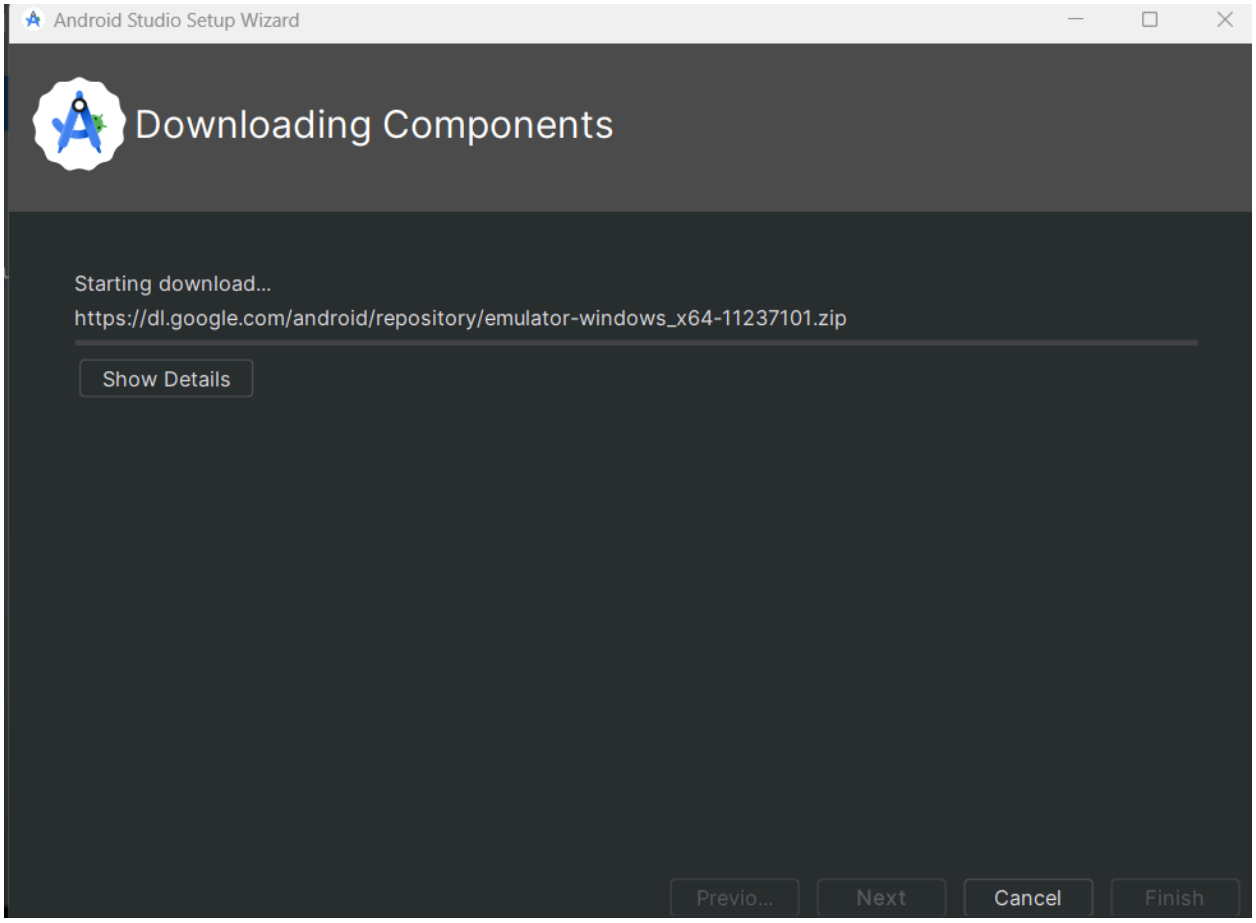

Android Studio Setup
Configuration Settings
Install Locations
Android Studio Installation Location
The location specified must have at least 500MB of free space.
Click Browse to customize:
C:\Program Files\Android\Android Studio
Browse..
< Back
Next >
Cancel

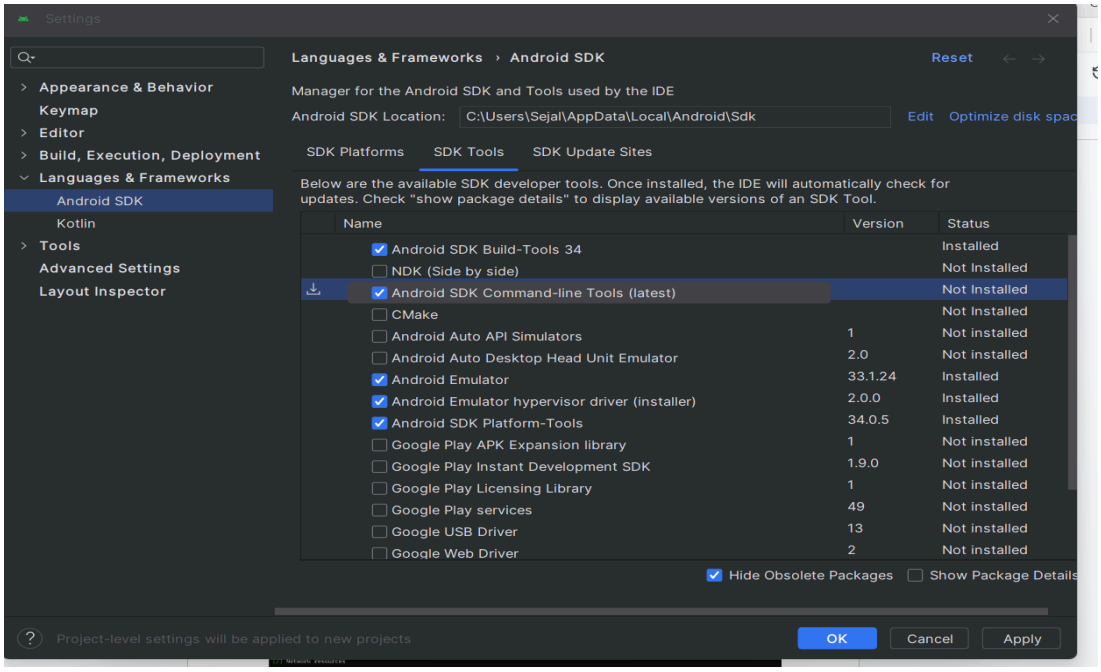

Android Studio Setup
Choose Start Menu Folder
Choose a Start Menu folder for the Android Studio shortcuts.
Select the Start Menu folder in which you would like to create the program's shortcuts. You can also enter a name to create a new folder.
Android Studio
Accessibility
Accessories
Administrative Tools
Apache NetBeans
Apache Tomcat 10.1 Tomcat10
AutoCAD 2022 - English
AutoCAD 2023 - English
Autodesk
BlueJ
CodeBlocks
docker-desktop
Do not create shortcuts
< Back
Install
Cancel

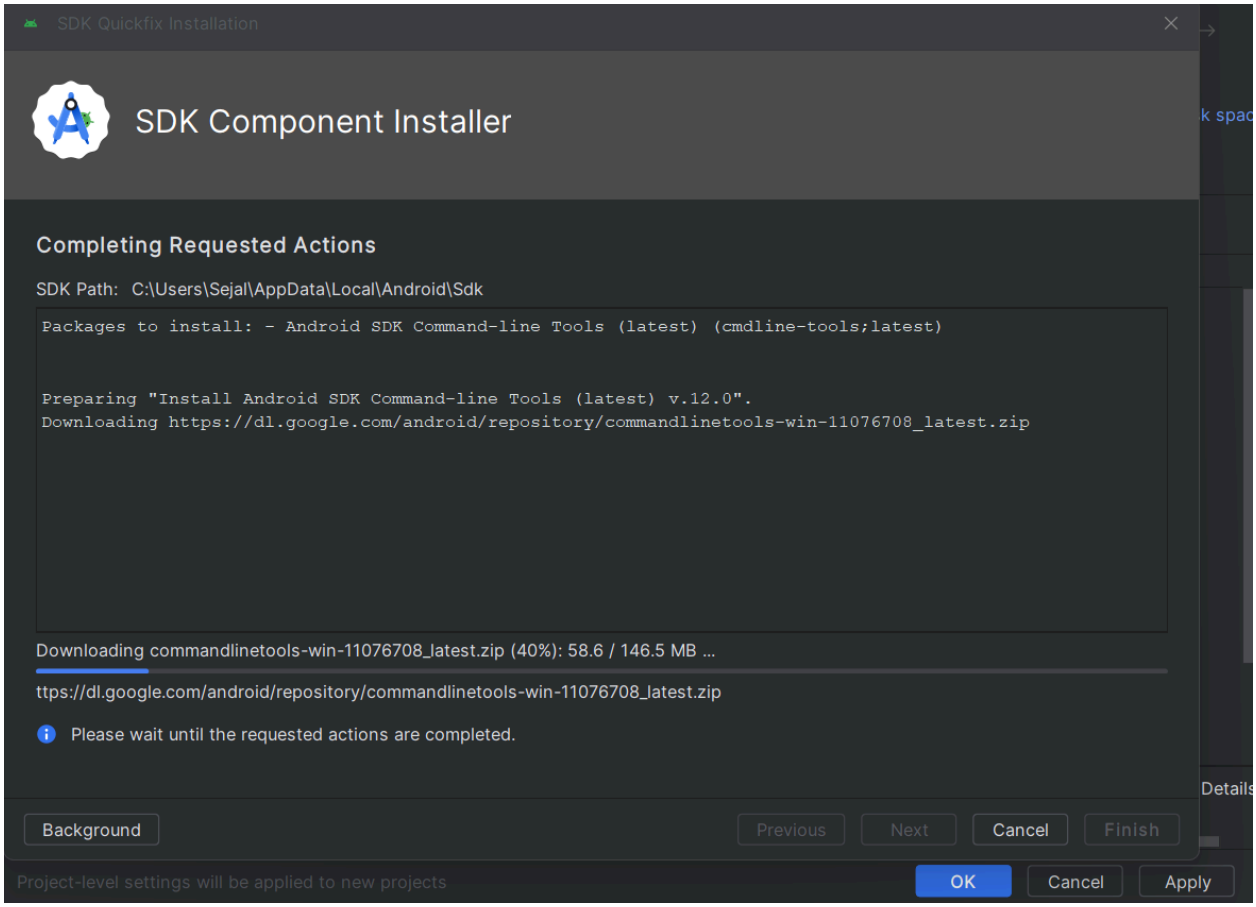

Android Studio Setup
Installation Complete
Setup was completed successfully.
Completed
Show details
< Back
Next >
Cancel


Android Studio Setup
Completing Android Studio Setup
Android Studio has been installed on your computer.
Click Finish to close Setup.
Start Android Studio
android studio
< Back
Finish
Cancel


Android Studio Setup Wizard
Welcome
Android Studio
Welcome! This wizard will set up your development environment for Android Studio.
Additionally, the wizard will help port existing Android apps into Android Studio
or create a new Android application project.
Previo...
Next
Cancel
Finish
videos
videos
6:46
3:10
Mix

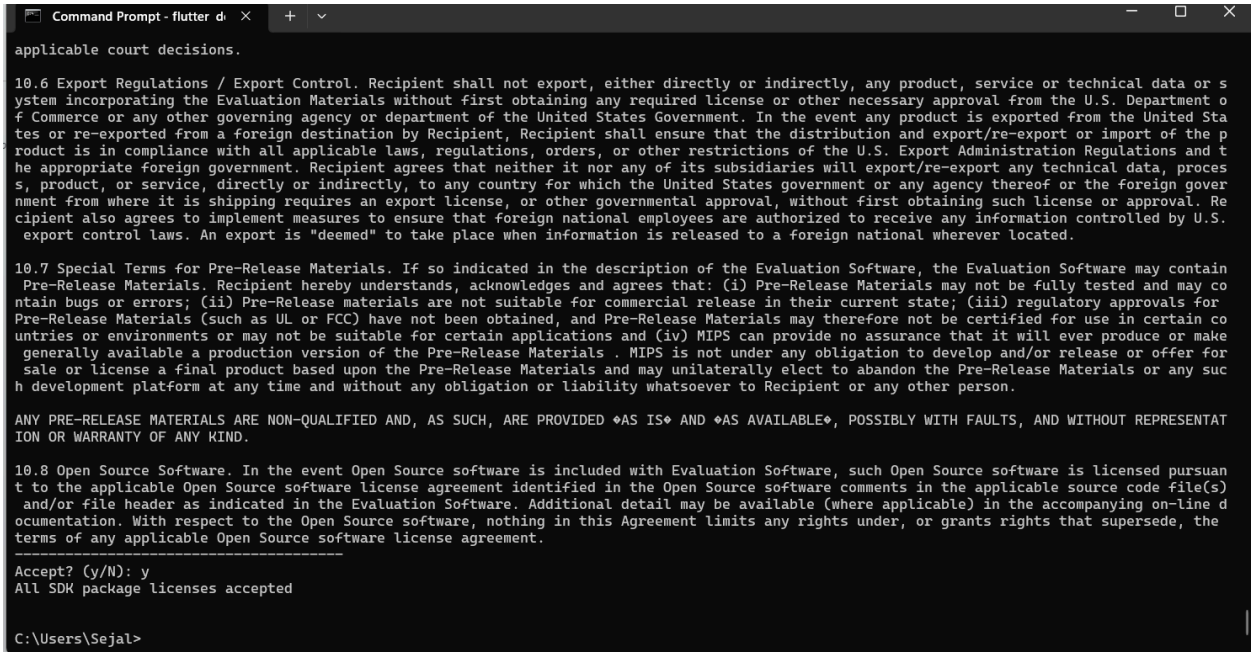

Android Studio Setup Wizard
Downloading Components
Starting download...
https://dl.google.com/android/repository/emulator-windows_x64-11237101.zip
Show Details
Previo...
Next
Cancel
Finish

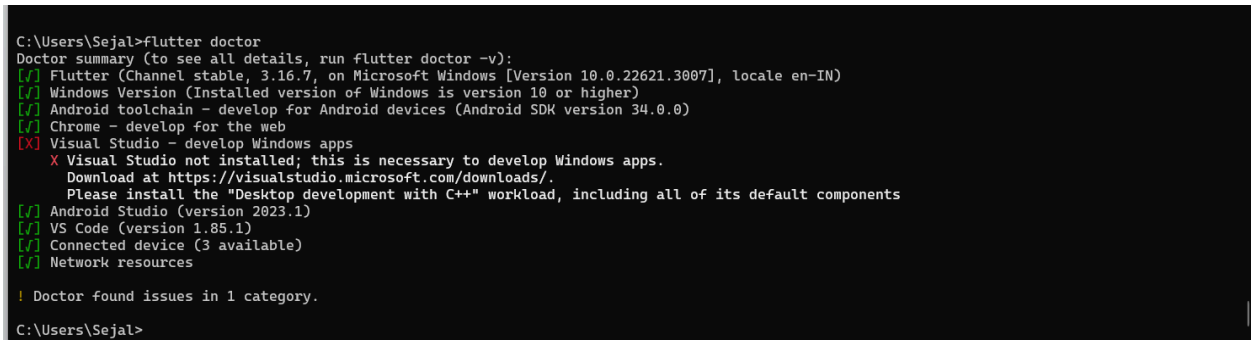

Settings
Appearance & Behavior
Keymap
Editor
Build, Execution, Deployment
Languages & Frameworks
Android SDK
Kotlin
Tools
Advanced Settings
Layout Inspector
Languages & Frameworks › Android SDK
Reset
Manager for the Android SDK and Tools used by the IDE
Android SDK Location: C:\Users\Sejal\AppData\Local\Android\Sdk
Edit
Optimize disk spac
SDK Platforms
SDK Tools
SDK Update Sites
Below are the available SDK developer tools. Once installed, the IDE will automatically check for updates. Check "show package details" to display available versions of an SDK Tool.
Name
Version
Status
Android SDK Build-Tools 34 Installed
NDK (Side by side) Not Installed
Android SDK Command-line Tools (latest) Not Installed
CMake Not Installed
Android Auto API Simulators 1 Not installed
Android Auto Desktop Head Unit Emulator 2.0 Not installed
Android Emulator 33.1.24 Installed
Android Emulator hypervisor driver (installer) 2.0.0 Installed
Android SDK Platform-Tools 34.0.5 Installed
Google Play APK Expansion library 1 Not installed
Google Play Instant Development SDK 1.9.0 Not installed
Google Play Licensing Library 1 Not installed
Google Play services 49 Not installed
Google USB Driver 13 Not installed
Google Web Driver 2 Not installed
Hide Obsolete Packages
Show Package Details
Project-level settings will be applied to new projects
OK
Cancel
Apply

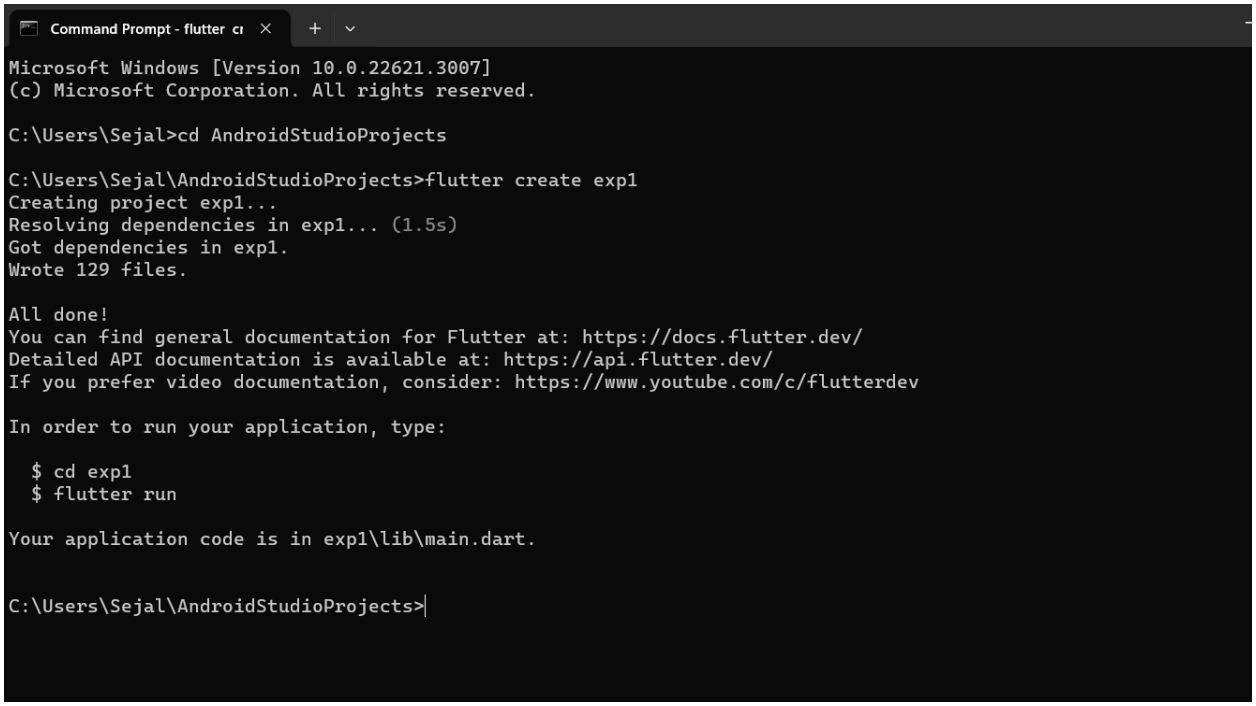


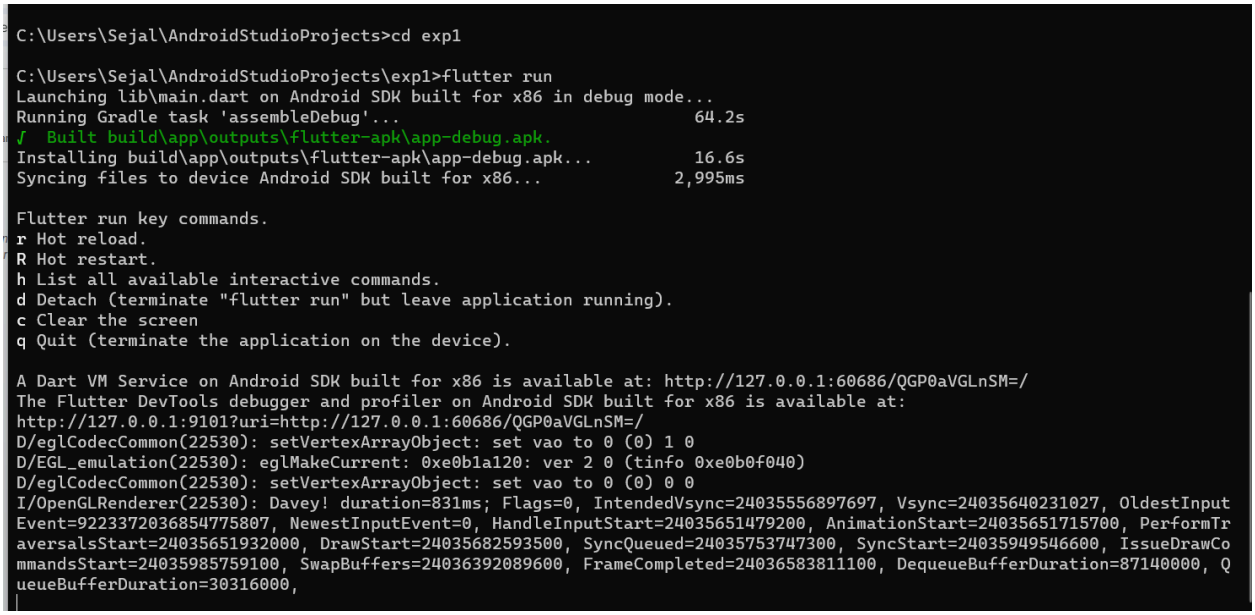

```
C:\Users\Sejal>flutter doctor
Doctor summary (to see all details, run flutter doctor -v):
[✓] Flutter (Channel stable, 3.16.7, on Microsoft Windows [Version 10.0.22621.3007], locale en-IN)
[✓] Windows Version (Installed version of Windows is version 10 or higher)
[!] Android toolchain - develop for Android devices (Android SDK version 34.0.0)
    ! Some Android licenses not accepted. To resolve this, run: flutter doctor --android-licenses
[✓] 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 2023.1)
[✓] VS Code (version 1.85.1)
[✓] Connected device (3 available)
[✓] Network resources

! Doctor found issues in 2 categories.

C:\Users\Sejal>
```

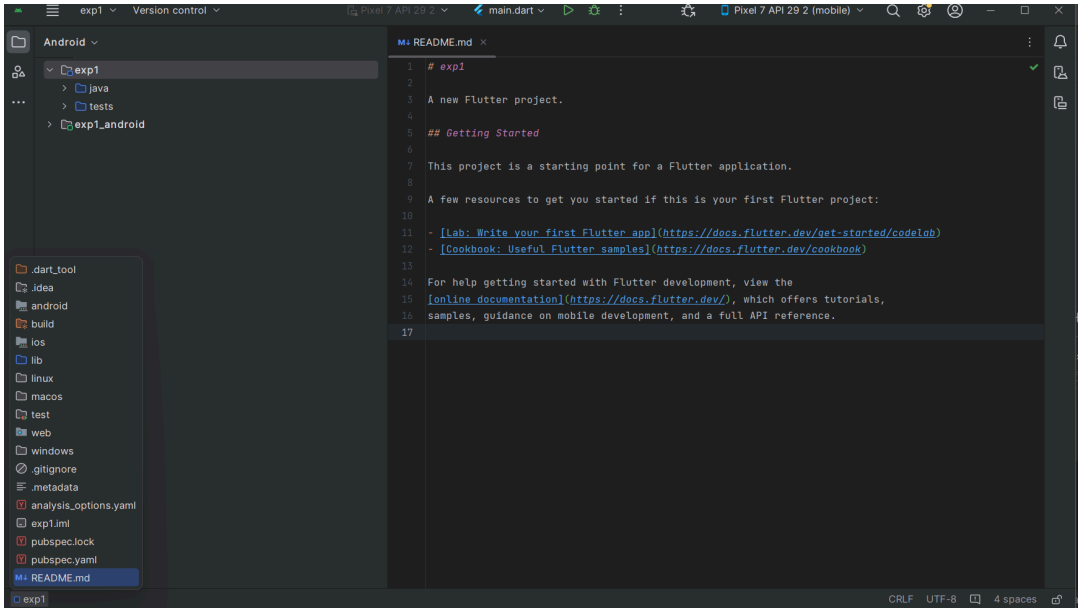
```
C:\Users\Sejal> flutter doctor --android-licenses
[======================================] 100% Computing updates...
4 of 7 SDK package licenses not accepted.
Review licenses that have not been accepted (y/N)?
```


Command Prompt - flutter d
applicable court decisions.
10.6 Export Regulations / Export Control. Recipient shall not export, either directly or indirectly, any product, service or technical data or system incorporating the Evaluation Materials without first obtaining any required license or other necessary approval from the U.S. Department of Commerce or any other governing agency or department of the United States Government. In the event any product is exported from the United States or re-exported from a foreign destination by Recipient, Recipient shall ensure that the distribution and export/re-export or import of the product is in compliance with all applicable laws, regulations, orders, or other restrictions of the U.S. Export Administration Regulations and the appropriate foreign government. Recipient agrees that neither it nor any of its subsidiaries will export/re-export any technical data, process, product, or service, directly or indirectly, to any country for which the United States government or any agency thereof or the foreign government from where it is shipping requires an export license, or other governmental approval, without first obtaining such license or approval. Recipient also agrees to implement measures to ensure that foreign national employees are authorized to receive any information controlled by U.S. export control laws. An export is "deemed" to take place when information is released to a foreign national wherever located.
10.7 Special Terms for Pre-Release Materials. If so indicated in the description of the Evaluation Software, the Evaluation Software may contain Pre-Release Materials. Recipient hereby understands, acknowledges and agrees that: (i) Pre-Release Materials may not be fully tested and may contain bugs or errors; (ii) Pre-Release materials are not suitable for commercial release in their current state; (iii) regulatory approvals for Pre-Release Materials (such as UL or FCC) have not been obtained, and Pre-Release Materials may therefore not be certified for use in certain countries or environments or may not be suitable for certain applications and (iv) MIPS can provide no assurance that it will ever produce or make generally available a production version of the Pre-Release Materials . MIPS is not under any obligation to develop and/or release or offer for sale or license a final product based upon the Pre-Release Materials and may unilaterally elect to abandon the Pre-Release Materials or any such development platform at any time and without any obligation or liability whatsoever to Recipient or any other person.
ANY PRE-RELEASE MATERIALS ARE NON-QUALIFIED AND, AS SUCH, ARE PROVIDED ◆AS IS◆ AND ◆AS AVAILABLE◆, POSSIBLY WITH FAULTS, AND WITHOUT REPRESENTATION OR WARRANTY OF ANY KIND.
10.8 Open Source Software. In the event Open Source software is included with Evaluation Software, such Open Source software is licensed pursuant to the applicable Open Source software license agreement identified in the Open Source software comments in the applicable source code file(s) and/or file header as indicated in the Evaluation Software. Additional detail may be available (where applicable) in the accompanying on-line documentation. With respect to the Open Source software, nothing in this Agreement limits any rights under, or grants rights that supersede, the terms of any applicable Open Source software license agreement.
Accept? (y/N): y
All SDK package licenses accepted
C:\Users\Sejal>

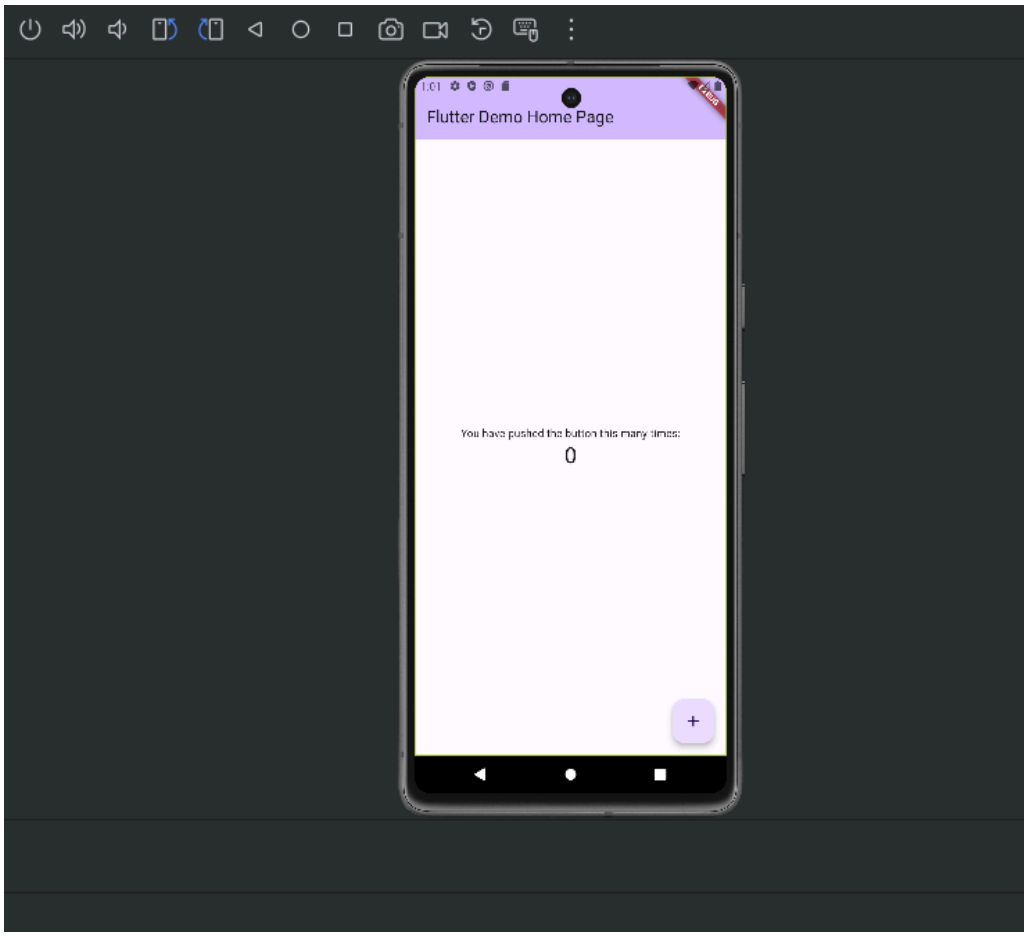

C:\Users\Sejal>flutter doctor
Doctor summary (to see all details, run flutter doctor -v):
[✓] Flutter (Channel stable, 3.16.7, on Microsoft Windows [Version 10.0.22621.3007], locale en-IN)
[✓] Windows Version (Installed version of Windows is version 10 or higher)
[✓] Android toolchain - develop for Android devices (Android SDK version 34.0.0)
[✓] 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 2023.1)
[✓] VS Code (version 1.85.1)
[✓] Connected device (3 available)
[✓] Network resources
! Doctor found issues in 1 category.
C:\Users\Sejal>


Command Prompt - flutter cr
Microsoft Windows [Version 10.0.22621.3007]
(c) Microsoft Corporation. All rights reserved.
C:\Users\Sejal>cd AndroidStudioProjects
C:\Users\Sejal\AndroidStudioProjects>flutter create exp1
Creating project exp1...
Resolving dependencies in exp1... (1.5s)
Got dependencies in exp1.
Wrote 129 files.
All done!
You can find general documentation for Flutter at: https://docs.flutter.dev/
Detailed API documentation is available at: https://api.flutter.dev/
If you prefer video documentation, consider: https://www.youtube.com/c/flutterdev
In order to run your application, type:
$ cd exp1
$ flutter run
Your application code is in exp1\lib\main.dart.
C:\Users\Sejal\AndroidStudioProjects>

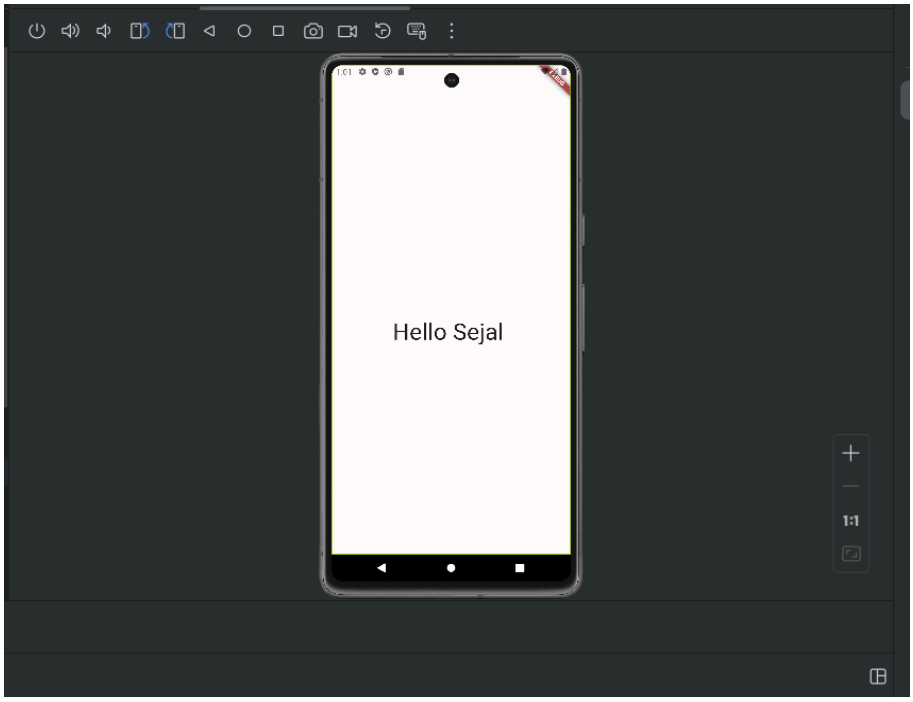

C:\Users\Sejal\AndroidStudioProjects>cd exp1
C:\Users\Sejal\AndroidStudioProjects\exp1>flutter run
Launching lib\main.dart on Android SDK built for x86 in debug mode...
Running Gradle task 'assembleDebug'... 64.2s
✓ Built build\app\outputs\flutter-apk\app-debug.apk.
Installing build\app\outputs\flutter-apk\app-debug.apk... 16.6s
Syncing files to device Android SDK built for x86... 2,995ms
Flutter run key commands.
r Hot reload.
R Hot restart.
h List all available interactive commands.
d Detach (terminate "flutter run" but leave application running).
c Clear the screen
q Quit (terminate the application on the device).
A Dart VM Service on Android SDK built for x86 is available at: http://127.0.0.1:60686/QGP0aVGLnSM=/
The Flutter DevTools debugger and profiler on Android SDK built for x86 is available at:
http://127.0.0.1:9101?uri=http://127.0.0.1:60686/QGP0aVGLnSM=/
D/eglCodecCommon(22530): setVertexArrayObject: set vao to 0 (0) 1 0
D/EGL_emulation(22530): eglMakeCurrent: 0xe0b1a120: ver 2 0 (tinfo 0xe0b0f040)
D/eglCodecCommon(22530): setVertexArrayObject: set vao to 0 (0) 0 0
I/OpenGLRenderer(22530): Davey! duration=831ms; Flags=0, IntendedVsync=24035556897697, Vsync=24035640231027, OldestInputEvent=9223372036854775807, NewestInputEvent=0, HandleInputStart=24035651479200, AnimationStart=24035651715700, PerformTraversalsStart=24035651932000, DrawStart=24035682593500, SyncQueued=24035753747300, SyncStart=24035949546600, IssueDrawCommandsStart=24035985759100, SwapBuffers=24036392089600, FrameCompleted=24036583811100, DequeueBufferDuration=87140000, QueueBufferDuration=30316000,


exp1
Version control
main.dart
Pixel 7 API 29 2 (mobile)
Android
exp1
java
tests
exp1_android
README.md
exp1
A new Flutter project.
Getting Started
This project is a starting point for a Flutter application.
A few resources to get you started if this is your first Flutter project:
- [Lab: Write your first Flutter app](https://docs.flutter.dev/get-started/codelab)
- [Cookbook: Useful Flutter samples](https://docs.flutter.dev/cookbook)
For help getting started with Flutter development, view the
[online documentation](https://docs.flutter.dev/), which offers tutorials,
samples, guidance on mobile development, and a full API reference.
.dart_tool
.idea
android
build
ios
lib
linux
macos
test
web
windows
.gitignore
.metadata
analysis_options.yaml
exp1.iml
pubspec.lock
pubspec.yaml
README.md
exp1
CRLF
UTF-8
4 spaces

Emulator


Flutter Demo Home Page
DEBUG
You have pushed the button this many times:
0
+

Output

```dart
import 'package:flutter/material.dart';
void main() {
 runApp(const MyApp());
}
class MyApp extends StatelessWidget {
 const MyApp({Key? key}) : super(key: key);
 @override

 Widget build(BuildContext context) {
   return MaterialApp(
     home: Scaffold(
       appBar: AppBar(

       ),
       body: Container(
         child: Center(
           child: Text("Hello Sejal ",
               style: TextStyle(
               fontSize: 40
           ),),
         ),
       ),

   ),
   );
   }
}
```

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