Name: Preeti Khamkar   **Div:** D15A   **Roll No.:** 28
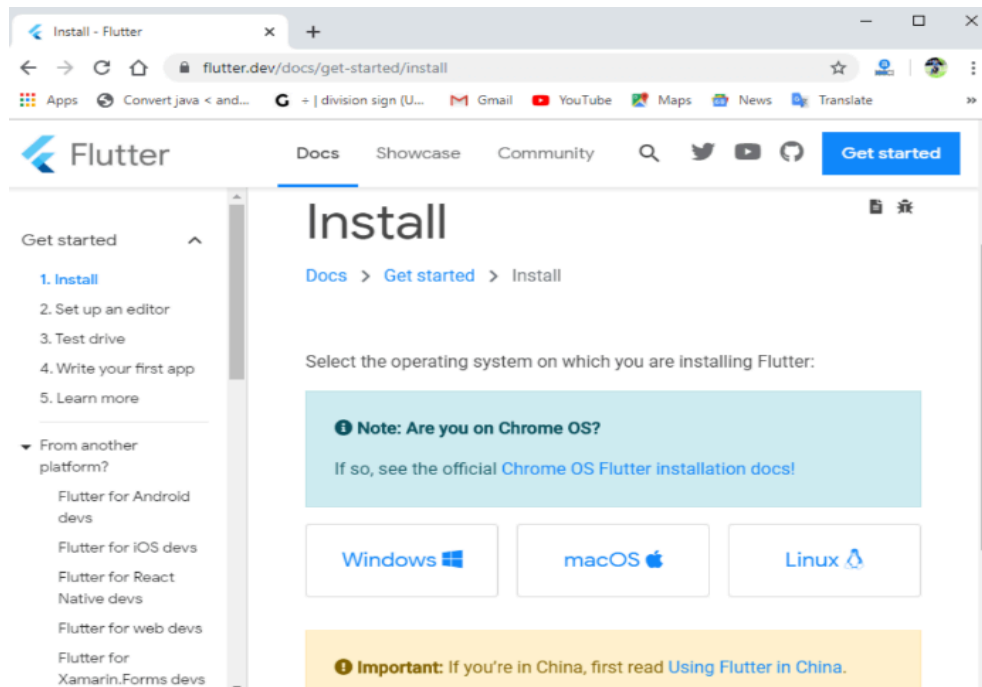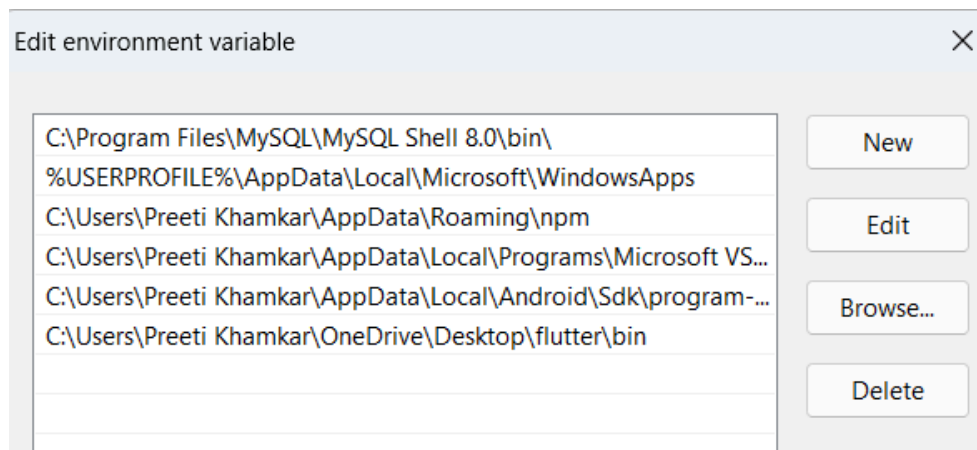
Aim: Installation and Configuration of Flutter Environment.
        Create a 'Hello World App' using Flutter.

Installation Steps:

1. Install Flutter SDK for Windows

2. Set Environmental Variables

3. $flutter command


```
Command Prompt                                                                                    —   □   ×
Microsoft Windows [Version 10.0.19042.1415]
(c) Microsoft Corporation. All rights reserved.

C:\Users\jalpa>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 informati
on. (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.
    --suppress-analytics    Suppress analytics reporting when this command runs.

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.
  format            Format one or more Dart files.
```

4. $flutter doctor


```
\Users\jalpa>
\Users\jalpa>
\Users\jalpa>flutter doctor
unning "flutter pub get" in flutter_tools...                17.0s
octor summary (to see all details, run flutter doctor -v):
] Flutter (Channel stable, 2.8.1, on Microsoft Windows [Version 10.0.19042.1415], locale en-US)
] 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
] Android Studio (not installed)
] VS Code (version 1.55.2)
] Connected device (2 available)

Doctor found issues in 2 categories.

\Users\jalpa>flutter doctor
octor summary (to see all details, run flutter doctor -v):
] Flutter (Channel stable, 2.8.1, on Microsoft Windows [Version 10.0.19042.1415], locale en-US)
] Android toolchain - develop for Android devices (Android SDK version 32.0.0)
  X cmdline-tools component is missing
    Run `path/to/sdkmanager --install "cmdline-tools;latest"`
    See https://developer.android.com/studio/command-line for more details.
  X Android license status unknown.
    Run `flutter doctor --android-licenses` to accept the SDK licenses.
    See https://flutter.dev/docs/get-started/install/windows#android-setup for more details.
] Chrome - develop for the web
] Android Studio (version 2020.3)
] VS Code (version 1.55.2)
] Connected device (2 available)

Doctor found issues in 1 category.
```
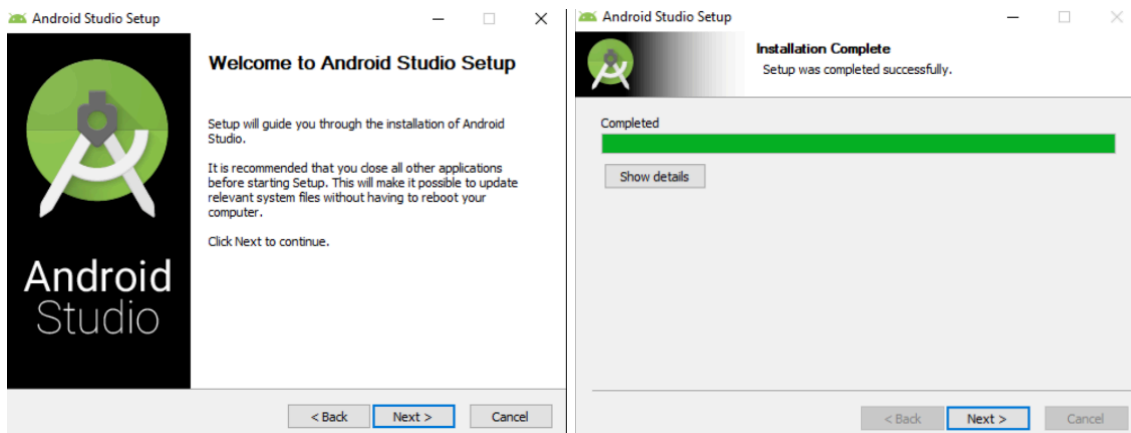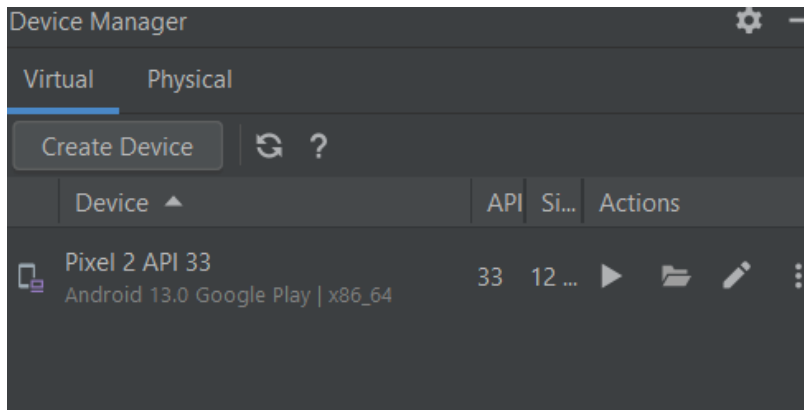
5. Install Android Studio and Android SDK

6. Create Virtual Device

Code:

Main.dart file

```
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(
    title: 'Welcome to Flutter',
    home: Scaffold(
```

```
    appBar: AppBar(
      title: const Text('Welcome to Flutter'),
    ),
    body: const Center(
      child: Text('Hello, Preeti Khamkar!'),
    ),
   ),
  );
 }
}
```

Output: