



## **Mobile Application Development Lab**

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BS (CS) 6B

**Lab 1**

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**Submitted to:**

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## Tasks

### 1. Write the main steps involved in Flutter installation.

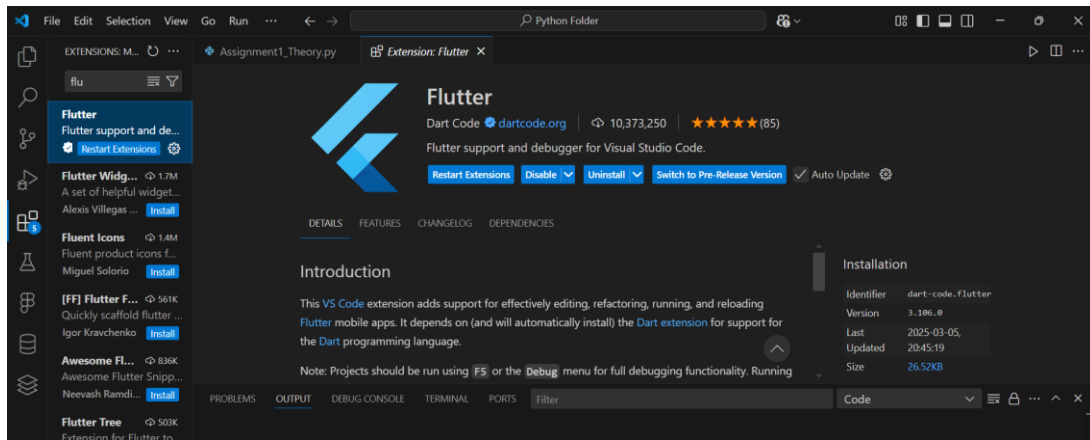
1. **Download Flutter SDK**
  - Visit the official Flutter website: <https://flutter.dev>
  - Download the latest stable version
2. **Extract the SDK**
  - Extract the downloaded file to a location
3. **Set Environment Variables (PATH)**
  - Add Flutter's bin directory to your system's environment variables.
4. **Verify Installation**
  - Open Command Prompt and run:  
flutter --version
5. **Install Dependencies**
  - For Android: Install **Android Studio**, configure **Android SDK**, and install required SDK tools.
6. **Enable Flutter in IDE**
  - Install **Flutter & Dart** extensions in VS Code or Android Studio.

### 2. How you connect your mobile phone in replacement of Virtual Device? Write step by step procedure.

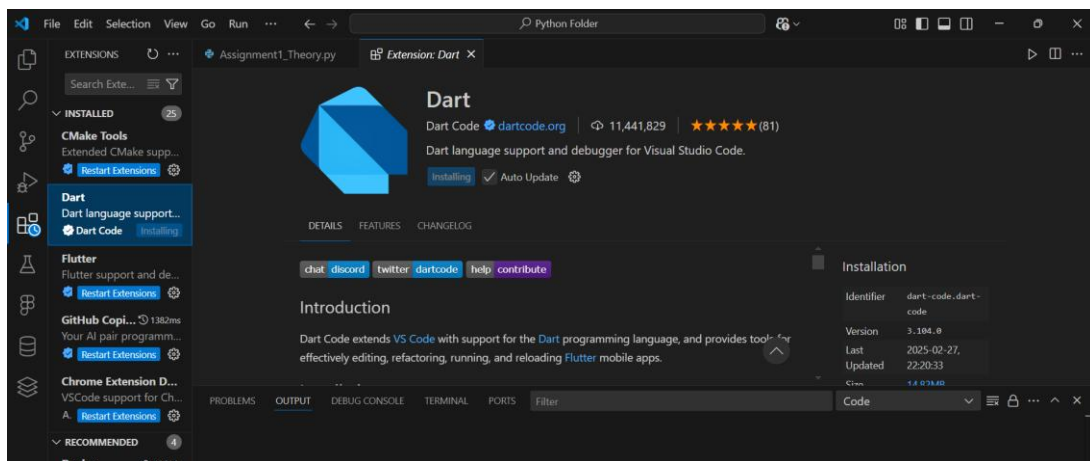
1. **Enable Developer Mode**
  - Go to **Settings > About phone > Tap Build Number 7 times** to enable Developer Mode.
2. **Enable USB Debugging**
  - In Developer Options, enable **USB Debugging**.
3. **Install Required Drivers**
  - Install your phone's ADB USB drivers (for Android devices).
  - For Samsung, install **Samsung USB Drivers**; for other brands, check manufacturer websites.
4. **Connect Phone to PC via USB**
  - Use a data cable to connect your phone.
5. **Allow Debugging Permission**
  - When prompted, allow debugging access on your phone.
  - Your device should be listed.

### 3. In VS Code, which extension you install for flutter and Dart?

1. **Flutter**



## 2. Dart



## 4. How can we create a flutter project?

1. Open VS Code.
2. Open the **Command Palette** (**Ctrl + Shift + P**).
3. Type Flutter: New Project and select it.
4. Enter the project name.
5. Choose the project location.
6. Wait for Flutter to generate the project.

## 5. What is the advantage of setting path in environment variables?

1. **Run Commands Globally** – Use flutter commands from any directory.
2. **No Need for Full Path** – Avoid typing long file paths.
3. **Improves Workflow** – Faster and more efficient development.
4. **Ensures IDE Integration** – Allows VS Code and Android Studio to detect Flutter automatically.
5. **Prevents Errors** – Avoids issues related to missing SDK paths.