

## 1. Basic runApp and MaterialApp

- **Question:** Explain the purpose of the `runApp()` function in Flutter. What is its role in the app lifecycle?
- **Exercise:** Create a simple Flutter app that displays "Hello, World!" as the text. Use the `runApp()` function to launch the app.

## 2. Text Widget

- **Question:** How can you style the text in Flutter? Provide an example of how to change the text color and font size using the `Text` widget.
- **Exercise:** Create a Flutter app that displays the text "Welcome to Flutter!" in bold with a large font size and a custom color (e.g., blue).

## 3. MaterialApp and Scaffold

- **Question:** What is the purpose of the `MaterialApp` and `Scaffold` widgets in a Flutter app? How do they work together to set up a basic layout structure?
- **Exercise:** Create a simple app using `MaterialApp` as the root widget and `Scaffold` to structure the app. Inside the `Scaffold`, display a `Text` widget in the center.

## 4. Row and Column Widgets

- **Question:** What is the difference between the `Row` and `Column` widgets in Flutter? When would you use each of them?
- **Exercise:** Create a layout with two sections: a horizontal row of three `Text` widgets at the top, and a vertical column of three `Text` widgets below. Use the `Row` and `Column` widgets appropriately.

## 5. Building Custom Widgets

- **Question:** How do you create your own widget in Flutter? What is the difference between `StatelessWidget` and `StatefulWidget`?
- **Exercise:** Create a custom widget that displays a simple message passed from its parent. Use `StatelessWidget` to create this widget.

## 6. Using Padding and Alignment

- **Question:** How can you add padding and align widgets in Flutter? What widget do you use to add padding around a child widget?
- **Exercise:** Modify your previous example where you created a `Text` widget, and wrap it with a `Padding` widget. Set the padding to 16 pixels and center the text inside the parent container.

## 7. Using Colors and Material Design

- **Question:** How can you set background colors in Flutter? What are some common `Material` color options available in Flutter?
- **Exercise:** Create a layout with a `Scaffold` that has a custom background color. Inside the `Scaffold`, place a `Text` widget with a contrasting text color.

## 8. Exploring Layouts with Row and Column

- **Question:** How can you control the alignment of items inside a `Row` or `Column` widget? What are some commonly used alignment properties?
- **Exercise:** Create a `Column` widget with three `Text` widgets. Align the first text to the top, the second to the center, and the third to the bottom using the `MainAxisAlignment` and `CrossAxisAlignment` properties.

## 9. State Management in StatelessWidget

- **Question:** Can a `StatelessWidget` have mutable data? If not, what kind of widget should you use if you need to change the UI dynamically?
- **Exercise:** Modify the custom widget you created in **Question 5** to display a counter that starts at 0 and increments when a button is pressed. You'll need to switch to a `StatefulWidget` for this.