Task Description: Your task is to design and implement a Unit Converter App that allows users to convert between different units of measurement. The app should support conversions for length, weight, and temperature units.

Subtasks:

Subtask 1: Design UI for the App The first subtask is to design the user interface (UI) for the app. The UI should have the following components:

• A dropdown menu or spinner to select the source unit
• A dropdown menu or spinner to select the destination unit
• A text field to enter the value to be converted
• A button to initiate the conversion
• A text view to display the converted value

You may choose to use additional UI components, such as labels or images, to enhance the app's usability.

Subtask 2: Implement the Conversion Logic

The second subtask is to implement the conversion logic for the app. You will need to create a function that takes the source unit, destination unit, and input value as parameters, and returns the converted value. You can use the following conversion factors:

Length Conversions

- 1 inch = 2.54 cm
- 1 foot = 30.48 cm
- 1 yard = 91.44 cm
- 1 mile = 1.60934 km

Weight Conversions

• 1 pound = 0.453592 kg
• 1 ounce = 28.3495 g
• 1 ton = 907.185 kg

Temperature Conversions

• Celsius to Fahrenheit: F = (C * 1.8) + 32
• Fahrenheit to Celsius: C = (F - 32) / 1.8
• Celsius to Kelvin: K = C + 273.15
• Kelvin to Celsius: C = K - 273.15

Subtask 3: Research on Llama2

In this subtask, you are required to research Llama2 and its possible use cases in mobile Android apps. Llama2 is a powerful Large Language Model that can be used for automating various tasks and adding features to Android apps. Write 500 words report about Llama2 with five ideas of how it can be used in mobile apps.

Subtask 4: Add Validation and Error Handling

The third subtask is to add validation and error handling to the app. You should ensure that the user enters a valid input value, and that the app does not crash if an invalid input is entered. You should also handle cases where the source unit and destination unit are the same.