Android Development – Day 4 Notes

1. LinearLayout

1 LinearLayout arranges views in a single direction.
2 Two orientations: vertical and horizontal.
3 vertical → Views placed top to bottom.
4 horizontal → Views placed left to right.

2. layout_weight

1 layout_weight is used to divide available space between views.
2 Useful for creating equal-sized buttons.
3 Commonly used in calculator UI and dashboards.
4 Parent layout can define weightSum for total distribution.

3. weightSum

1 Defines the total weight value in the parent LinearLayout.
2 Child views take space based on their layout_weight.
3 Example: weightSum = 4 and each child weight = 1 → equal width.

4. gravity

1 gravity is used to align content inside a view.
2 center → Align content to the middle.
3 center_horizontal → Center left and right.
4 center_vertical → Center top and bottom.
5 Used to properly position text and buttons.

5. layout_gravity

1 layout_gravity is used to position the view inside its parent.
2 Different from gravity (which aligns content inside the view).

6. Best Practices

1 Avoid using match_parent height for multiple children in vertical layout.
2 Use wrap_content or layout_weight for proper distribution.
3 Use margins and padding for spacing.
4 Plan UI structure before coding.

Goal of Day 4:

Understand LinearLayout orientation, weight distribution, gravity, and how to design equal-sized UI components like a calculator layout.