## Simple Overview of Important Concepts of week 3

**Simple geometric features.** Simple geometric features are basic spatial shapes and structures used to represent spatial information and analyse it, including plotting points on a map, measuring distances between locations, or conducting spatial operations like intersecting or buffering. In the package of they include:

- Point: Representing an individual location in space.
- LineString: Connecting two or more points, forming linear features.
- Polygon: Enclosed areas with multiple vertices, representing boundaries or regions.
- Multipoint: Collection of points.
- MultiLineString: Collection of LineStrings.
- MultiPolygon: Collection of polygons.
- Geometry Collection: Combining multiple geometric features into a single object.

**GADM** project. GADM project provides maps and spatial data for all countries and their sub-divisions. You can browse maps or download the data to make your own maps from the site: https://gadm.org/

mapview. The mapview is a function in the R sf package to quickly create and visualize spatial objects on interactive maps. One can add multiple layers to the map with interactive features. mapview allows you to export the interactive map as an HTML file, which can be shared and viewed in web browsers. The exported map retains its interactive features, allowing others to explore and interact with the spatial data.