Practical 2: Individual practical exercise (GIS lab): demonstrate individual works (the ArcGIS file - geo-database for urban cadaster, the sample index map, certificates for urban land holdings)

1. Design the Geodatabase Template

- **Folder: (e.g.** HawassaK01CadasterYourname)
- **Database**: Create a new File Geodatabase (e.g., HawassaK01Cadaster.gdb).
- **Feature Dataset**: Create a Feature Dataset according to the lecture.
- **Feature Classes**: Include kebele, ketena, sefer, block, and parcel.
  - **Hint**: Ensure you add the appropriate fields/attributes according to the standard provided in the lecture materials.

2. Prepare Required Data and Data Sources

- **Kebele Layer**: Obtain the administrative boundary layer. Edit the required attributes and boundaries.
- **Field Data**: Ensure accurate GPS coordinates and related attributes.
- **Orthophotos**: Source high-resolution orthophotos.

3. Conduct Systematic Land Parcel Mapping

- **Divide the Kebele**:
  - **Sections (Ketena)**: Divide the kebele into sections.
  - **Neighborhoods (Sefer)**: Subdivide **sections** into neighborhoods.
  - **Blocks**: Create blocks within **neighborhoods**.
  - **Parcels**: Digitize parcels within **each** block.
- **Note**: **Ensure** the division adheres to the cadastral rules stated in the lecture material and directives.

4. Data Entry and Quality Control

- **Attribute Entry**: Enter non-spatial data consistently.
- **Quality Control**:
  - Check **and** correct spatial errors.
  - Review **and** correct attribute data.

5. Generate Unique Parcel Identification Code (UPIC)

- **Develop UPIC Scheme**: Create a standardized coding system.

- **Assign Codes**: Apply UPIC codes to all parcels.

Note: Refer to the lecture materials for details on attribute names and additional specifications.

6. Evaluation Instructions

Type: Individual Assignment

Points: 6%

Due Date: November 06, 12 PM

Progress Check:

- **Date**: October 31

- **Requirement**: Students must show their progress.

Submission Method:

- Use the Telegram of the sub-group.

Folder Naming Convention:

- Name your folder as **hawassa01cadasterYOURname**.

File Format:

- **Zipped Folder**: Only zip the folder with the file geodatabase.

- **Exclusions**: Do not include any other sub-folders or files.

Penalties:

- **Late Submission**: Each day late incurs a penalty of **-3** points until the score reaches zero.

- **Mandatory Submission**: Submission is mandatory. Failure to submit will result in being disallowed from taking the final exam