Exercises tmap course day 4

Exporting

1. Take one of the maps created earlier this course
2. Export it pdf for different purposes:

a. A journal paper
b. A large poster
c. A logo

3. Export the map as interactive map.

Shiny

4. Make a shiny app with a select input where the user can choose a variable from `slo_regions`, and a choropleth output with the corresponding variable.

Layout

5. Take one of the maps created earlier this course
6. Add various map components, like a scale bar, a title, and a map component.
7. What is the best place for all these components? Put them there. Tip: use `tm_comp_group()`
8. Make the layout as desired. Experiment with map frame, background colors, etc.

Extensions

9. [Install](#) and load the library **tmap.mapgl**.
10. Use `rtm()` to rotate between the modes (now there should be four!)
11. Set the mode to `maplibre` (or `mapbox` if you have an [API key](#))
12. Render the maps created before in this new mode. Note that this package is in development, so some feature may not work yet.
13. Experiment with `tm_polygons_3d`. For instance, using this example:

```
tmap_mode("maplibre")
slo_elev_poly = as.polygons(slo_elev / 100, round = TRUE)
tm_shape(slo_elev_poly) +
  tm_polygons_3d(
    height = "elevation",
    fill = "elevation",
    fill.scale = tm_scale_continuous(values = "hcl.terrain"),
    options = opt_tm_polygons_3d(height.max = 2600)) +
tm_maplibre(pitch = 75)
```