

# QGIS\_task1

## 1. Read data

- *Add Delimited Text Layer*: “punktid.csv”
- *Add Vector Layer* “soomaa.shp”
- *Add Raster Layer* “korgusraster.tif”

## 2. Check Data and metadata of layers

- Check layer *Properties* (CRS)
- Check *Attribute Table* (Columns, values)

## 3. Reproject layers

- Set all layers to the same CRS (EPSG: 3301), use *Reproject*, *Warp*
- Save reprojected layers

## 4. Change symbology

Change the symbology of the layers:

- Points should represent the Esri\_label
- Use a proper color ramp for the elevation raster

5. Use *Join Attributes by Location* to find which Points are inside the soomaa vector

6. Use *Extract by Attribute* to filter the points with “Crops” in the column “Esri\_label”

7. Using the selected “Crops” points, create a *Buffer* of 10km around them

8. Use *Intersection* to see if any of the created Buffers intersects with the Soomaa layer. How large is the area? (*Field Calculator*)

9. Crop/Mask the elevation raster with the soomma vector layer

## 10. Raster

- Use *Raster layer statistics* to get a basic summary of the clipped Raster
- Use *Reclassify by Table* to create a new elevation (eesti.korgu)raster. Values <20 should be change to 0, values >= 20 should change to 20

OR

- Change the symbology of the elevation raster (eesti.korgu) so values >20 are in one color and values >= have another color

## 11. Map design

- Recreate the map #3 and map #5 of the R task (m3, m5)
- For map #3 change the symbology of the points so they represent the Corine\_label
- A proper map for a cartographer should include a Title, North Arrow, a Scale Bar, and informative legends of what is represented.
- You can add a nice background layer. You can use the next steps for it (thanks to “[Klas Karlsson](#)”:
  - a) Open the link and copy the script from GitHub [link](#)
  - b) In QGIS open the *Python Console* on the toolbar. Paste the script on the console and click Enter
  - c) Close the python console
  - d) On the Browser Panel, on the XYZ tiles section you should see now a set of layers. You can use this as Base maps (Figure 1)
  - e) An alternative is to use a WMS from the “[Estonian Land Board](#)”

