Question 1

The task is to recognize the following language:

- Any root in Turkish is included; *ev*, *araba*, etc.
- Genitive suffix; *arabanın*, *evin*, etc.
- Locative suffix; *arabada*, *evde*, etc.
- *-ki* suffix; *arabadaki*, *evinki*, etc.
- Plural suffix.

You are required to write an `xfst` script that maps the underlying forms to surface forms and vice versa.[1] You have to be able to handle any legitimate combination of these roots with the given suffixes (e.g. *arabadakilerinkilerde*) *and* you have to be able to reject any ungrammatical combination (e.g. **arabadalar*, this is not plural suffix, it is third person plural agreement suffix). You also need to handle the morphophonemics of these combinations, how to adjust vowels, where to insert an /n/, etc.

You can follow the example here. You are also advised to prepare a test file like this to save yourself from retyping your examples again and again. Assuming that you keep your script in a file `myscript.xfst` and your test file in `mytest.txt` (you are free to pick any name you like), you can load your script by typing

```
source myscript.xfst
```

and run your script on the test file by typing

```
down < mytest.xfst
```

or, if you are analyzing do

```
up < mytest.xfst
```

don't forget the '<'.

You may consult Göksel and Kerslake (2005) in case you need some background in Turkish morphology.

Put your script and test files in a `zip` bundle and submit via email to me.

[1] If you cannot run `xfst`, please seek help from the class; if that doesn't work, contact me.