# Assignment

Our field team has compiled a database of all the mushrooms they have found in the wild on a specific day. The team has recorded the physical characteristics of the specimen found, its coordinates and the time. We want to load the dataset in the above url into a relational database as our team will want to run a number of queries on this dataset.

Because our field team has very little time, some fields will need to be translated before loading into the database:

1. cap-shape: bell=b,conical=c,convex=x,flat=f, knobbed=k,sunken=s

3. cap-color: brown=n,buff=b,cinnamon=c,gray=g,green=r, pink=p,purple=u,red=e,white=w,yellow=y

5. odor: almond=a,anise=l,creosote=c,fishy=y,foul=f, musty=m,none=n,pungent=p,spicy=s

8. gill-size: broad=b,narrow=n

9. gill-color: black=k,brown=n,buff=b,chocolate=h,gray=g, green=r,orange=o,pink=p,purple=u,red=e, white=w,yellow=y

14. stalk-color-above-ring: brown=n,buff=b,cinnamon=c,gray=g,orange=o, pink=p,red=e,white=w,yellow=y

17. veil-color: brown=n,orange=o,white=w,yellow=y

19. ring-type: cobwebby=c,evanescent=e,flaring=f,large=l, none=n,pendant=p,sheathing=s,zone=z

20. spore-print-color: black=k,brown=n,buff=b,chocolate=h,green=r, orange=o,purple=u,white=w,yellow=y

21. population: abundant=a,clustered=c,numerous=n, scattered=s,several=v,solitary=y

22. habitat: grasses=g,leaves=l,meadows=m,paths=p, urban=u,waste=w,woods=d

We want you to create a relational database schema representing the data described, a script to clean, translate and load the data from the csv into the database, and write the queries our team will run:

* How many different species of mushroom are there, if a species is identified by the attributes 1-20?
* Does habitat and cap-color correlate?
* Considering a specific geographical point, what colours should we be able to see in the 10 km around it?

# Submission

Please provide a link to a Github (or similar service) repository. The repository will contain 3 folders:

* db, with the database creation scripts
* etl, with the scripts to process the csv file
* sql, containing the three queries described above

Please provide a readme file with all necessary steps for running the exercise.