# NBD Assignment 3 – MongoDB

Import the cwiczenia2.json file:

* In one console run the database server with mongod command
* In second console import data using the following command:

mongoimport --file ./ cwiczenia2.json --db nbd –collection

If MongoDB rejects some documents, don’t worry

Run mongo shell with the following command:

mongo

specify database to use with the following command:

use nbd

Build the following queries:

1. Find one person from the database

*db.people.findOne( {} )*

1. Find one Chinese woman

*db.people.findOne( { nationality: "China",sex:”Female” } )*

1. Find all German men

*db.people.find( { nationality: "Germany",sex: "Male" } )*

1. Find all people in the database with weight in the <68, 71.5) range

*db.people.find({ $expr: { $and: [ { $gte: [ { $toDouble: "$weight" }, 68 ] } , { $lte: [ { $toDouble: "$weight" }, 71.5] }]}})*

1. First and last names and cities of people born in 21st century

*db.people.find({ $expr: {$gte: [{ $toDouble:{$substr: ["$birth\_date",0,4] }},2000]}},{first\_name:1,last\_name:1,"location.city":1})*

1. Add yourself to the database (data on credit card, address and weight may be fictional)

*db.people.insertOne({sex:"Male",first\_name:"Roman",last\_name:"Dub",job:"Software Engineer",email: "s13709@pjwstk.edu.pl",location:{city:"Warsaw",address:{streetname:"Okrag",streetnumber:"69"}},description:"Hello World",height:"170.00",weight:"70.00",birth\_date:"1998-05-20T02:55:03Z",nationality:"Ukraine",credit:[{type:"switch",number:"1234123412341234",currency:"USD",balance:"222.22"}]})*

1. Remove people with height >190cm from the database

*db.people.remove({$expr: {$gt:[{$toDouble: "$height"},190]}})*

1. Replace “Moscow” with “Moskwa” in city names for all people in the database

*db.people.update({"location.city":"Moscow"},{$set:{ "location.city":"Moskwa"}},{multi:true})*

1. Add property “hobby” with value “table tennis” to all people with first name “Antonio”

*db.people.updateMany({first\_name:"Antonio"},{$set:{ "hobby":"table tennis"}})*

1. Remove the “email” property from all people having “Editor” as their job

*db.people.updateMany({job:"Editor"},{$unset:{"email":1}})*

Send solutions in the following format: for each task send 2 files – file with the query and file with result. Name files using the following pattern: query\_X.js, result\_X.json where X is the task #.

In order to save query results to file wrap the query with printjson function and add .toArray() after find if necessary – e.g. printjson(db.people.find().toArray()).

Put such query into a file, run mongo shell the following way:

mongo dbname queryfile >> resultfile

e.g.

mongo nbd query\_1.js >> result\_1.json