I. (2 points) NBP Web API documentation is available at *http://api.nbp.pl/en.html*. This API allows us to retrieve currency rates and gold prices in XML and JSON format.

Using the Postman application, make requests to the API:

- gold price on February 10, 1994 in JSON format,
- gold price on September 1, 2014 in XML format,
- today's average Euro price in XML format
- The series of the last two US dollar rates

For each request, take a screenshot of the Postman application window showing all changed query settings and the query result.

Send screenshots as separate PNG files. Name the files *sXXXXX-TPO9-Y.png*, where *sXXXXX* is your index number and *Y* is the number of the request.

II. (4 points) Create an API that will calculate BMI (*http://pj.edu.pl/BMI*) and BMR (*http://pj.edu.pl/BMR*). Calculate BMR using the revised Harris–Benedict equation. Sample requests and responses:

BMI

```
Request:
Accept: application/json
GET /api/v1/BMI?weight=80&height=180

Response:
{
    "weight": 80.0,
    "height": 180.0,
    "bmi": 24,
    "type": "Normal"
}

Request:
Accept: text/plain
GET /api/v1/BMI?weight=80&height=180

Response:
24.69
```

If someone provides a value ≤ 0 as weight or height, the response code should be:

400 Bad Request with the reason header:

"invalid data, weight and height parameters must be positive numbers".

BMR

```
Request:
Accept: application/json
GET /api/v1/BMR/man?weight=80&height=180&age=25

Response:
{
    "gender": "man",
    "weight": 80.0,
    "height": 180.0,
    "age": 25,
    "bmr": 1882
}

Request:
Accept: text/plain
GET /api/v1/BMR/man?weight=80&height=180&age=25

Response:
1882kcal
```

If someone provides a value ≤ 0 as weight, height or age, the response code should be:

499 Invalid Data with the reason header:

"invalid data, weight, height and age parameters must be positive numbers".

In BMR, instead of *man*, we can also enter *woman* - then BMR is calculated differently. If we give other value than *man* or *woman* as gender, we return *400 Bad Request* code with the reason "*invalid gender data*".

BMI and BMR should be returned as integers, but weight and height can be returned as floating point numbers.

You must also ensure that information can be returned in the *XML* format. The information contained in the response in the case of *XML* is similar to that in *JSON*.

Use the knowledge acquired during the lecture and good programming practices.

Send the solution as a ZIP archive called *sXXXXX-TPO9.zip*, where *sXXXXX* is your index number.

Send a short video presentation how your solution works as a MP4 file called *sXXXXX-TPO9.mp4*, where *sXXXXX* is your index number.