



This data was recorded with the help of bash scripts and excel(which is responsible for displaying the data). We created scripts with requests to the server as XML files which were sent to a server. There can be found different folders in the scalability_testing subdirectory under testing which contain the XML files for each request. Using ./flush_run.sh in ~/hw4/src, we can start the server. On another terminal we can run ./scalability_test.sh test_xx where xx is the number of requests. Test_xx is the folder name with xx number of xml files. Another batch of testfiles can be generated with the script named generate_create_xmls which takes 2 arguments with flags -i and -n. Sepcify the file destination folder along with filename after the -l flag and the number of files you want to create after the -n flag. Example

```
python3 generate_create_xmls.py -i test_310/file_ -n 310
```

would create 310 xml files in the test_310 directory whose names start with file_. File name examples:

```
file_0.xml, file_1.xml, ...
```

As is visible, the time taken by server to process the number of requests increases linearly with respect to the number of requests with a few exception cases for which can be attributed to other factors on the system that hosts the server. In general, if this server were to perform on an even larger scale, the performance could be estimated for processing n number of requests easily by carefully analyzing the data