

# Operating Systems and Networks

## Assignment 5 - README

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## Contents

- **Concurrency, Parallelism and Networking**
  - **Work Done**
  - **Directory Structure**
  - **Running the Code**
    - **Question 1**
    - **Question 2**
    - **Question 3**

## Concurrency, Parallelism and Networking

### 1) Work Done

- ☒ Question 1 - Course Allocation Portal:
  - ☒ **BONUS**
- ☒ Question 2 - The Clasico Experiment:
  - ☒ **BONUS**
- ☒ Question 3 - Multithreaded Client and Server

### 2) Directory Structure

```
./2019114001_assignment_5
├── q1
│   ├── Makefile
│   ├── Question1_Report.pdf
│   ├── run_test.sh
│   ├── src -----> Contains the code
│   └── tests -----> Contains the test inputs
├── q2
│   ├── Makefile
│   ├── Question2_Report.pdf
│   ├── run_test.sh
│   ├── src -----> Contains the code
│   └── tests -----> Contains the test inputs
└── q3
    ├── Makefile
```

```
| |—— Question3_Report.pdf
| |—— run_test.sh
| |—— src -----> Contains the code
| |—— tests -----> Contains the test inputs
|—— README.pdf
```

## 3) Running the Code

### 3.1) Question 1

```
# Compiling the code
$ cd q1
$ make

# This produces the file: ./main

# Running the code
$ ./main
```

### 3.2) Question 2

```
# Compiling the code
$ cd q2
$ make

# This produces the file: ./main

# Running the code
$ ./main
```

### 3.3) Question 3

```
# Compiling the code
$ cd q3

# Compiling the server
$ make server

# Compiling the client
$ make client

# Compiling both at same time
$ make

# This produces the files: ./server and ./client

# Running the server
$ ./server <num_of_threads_in_pool>

# Running the clients
$ ./client
```

- By default it uses the port 6969 to run the server