Backend Challenge

- Assumptions
- How to build
- How to run

Assumptions

- Web server will not send a message containing an ID once it has sent a DONE message already before. In other words, ID message will never come from any source after a DONE message of that source.
- The web server will not terminate itself before application had a chance to sink all data to it. It is observed that for large data-set (n > 10,000) the web server terminates itself in 6 seconds which is not enough for application to sink remaining data to web server. This 6 seconds timeout needs to be increased when processing large data-set. Ideally, there should be no timeout. Instead web server should terminate only after it has received all data from application.

How to build

Extract the raisin-solution.zip file into any folder. It will create raisin-solution directory on extraction. Change directory to "raisin-solution". It contains pom.xml in it. Then run mvn command as shown below to build the application.

```
## How to build

$ cd raisin-solution

$ dir

11/26/2017 12:05 PM 2,655 pom.xml

11/22/2017 09:18 AM <DIR> src

11/26/2017 01:01 PM <DIR> target

$ mvn clean compile assembly:single
```

This will create "raisin-solution-1.0-SNAPSHOT-jar-with-dependencies.jar" file under raisin-solution/target folder.

```
How to build
$> cd target
$> dir
11/26/2017 01:00 PM
                        <DIR>
                                        archive-tmp
11/26/2017 01:01 PM
                                        classes
                        <DTR>
11/26/2017
           01:00 PM
                        <DIR>
                                        generated-sources
11/26/2017 01:00 PM
                        <DIR>
                                        maven-status
11/26/2017 01:01 PM
                        <DIR>
                                        test-classes
11/26/2017 01:00 PM
                        12,315,576
raisin-solution-1.0-SNAPSHOT-jar-with-dependencies.jar
```

How to run

Go to the folder containing the "raisin-solution-1.0-SNAPSHOT-jar-with-dependencies.jar" file (raisin-solution/target).

First run the python web server and then run following command in another terminal.

How to run

- \$> cd target
- \$> java -jar raisin-solution-1.0-SNAPSHOT-jar-with-dependencies.jar

Log file "raisin-solution.log" will be created in the same folder from which above command is executed.