

## Kyloe Technical Test

### Scenario

A system generates events that are stored in a file in the following format:

event type, entity name, entity id, [fields updated], timestamp

### Example:

```
INSERTED, Placement, 12, null, 2018-04-10 12:34:56.789
```

```
INSERTED, Placement, 13, null, 2018-04-10 12:43:10.123
```

```
UPDATED, Company, 123, [status, companyUrl], 2018-04-10 12:44:00.123
```

```
UPDATED, Placement, 13, [status, hoursPerDay, overtimeRate], 2018-04-10 14:52:43.699
```

### Notes:

- event type – can be one of INSERTED, UPDATED, DELETED
- timestamp – always in yyyy-MM-dd HH:mm:ss.ms format
- fields updated – are the names of the fields rather than the field data
- events may not be in timestamp order

### Requirement

Develop a system that takes an events file as input and supports the following operations:

#### Basic:

1. Get all events of a specific event type
2. Get all events affecting a particular field. For example, all events where the *status* changed.

#### Advanced:

3. Get all events that between two timestamps (inclusive)
4. Allow combinations of (1), (2) and (3). For example, all UPDATED events where status changed between 2018-04-10 12:00:00.000 and 2018-04-10 12:00:11.500

The output can be to the console.

