

## FiQ (A simple file based messaging queue)

FiQ is a simple file backed messaging queue that supports the following operations:

1. A CLI producer to enqueue a message to the queue
2. A CLI consumer to consume messages from the queue

Design and implement FiQ that supports the above operations in addition to the below requirements:

### Producer CLI

The producer CLI should accept user prompts to enqueue messages until the user decides to quit the session using SIGINT.

The format of the input is defined below:

```
Unset
<key>:<message>:<processing_time>:<count>

where

key is alphanumeric string
message is alphanumeric string
count is an optional integer indicating the number of messages of this type to
be enqueued to the queue
```

The messages should be persisted in a format you chose, and should be readable by the consumer CLI.

### Consumer CLI

The consumer CLI polls messages from the queue and dispatches it to a set of workers. The workers should sleep for **<processing\_time>** while processing a single message.

The consumer CLI should at minimum accept the following arguments:

```
Unset
concurrency: The number of concurrent workers
```