SSE Sign-off Task: PaaS Datastore API

As part of your coursework, we will issue several sign-off tasks. Your solutions to three of these must be signed off. The exercises from lab 5 should be helpful with this task.

Task – PaaS-based API with persistent data storage

Create a service (API) in Google App Engine that is a simple storage for numeric values in named registers. It has four operations: POST to add a number to a named register, PUT to set a named register to a given number, GET to read the value of a named register, DELETE to drop a named register.

All request bodies in POST and PUT, and all response bodies in GET, POST and PUT, should simply be a number with `text/plain` content type.

For example, we can have two named registers, "jack" and "foo":

```
GET    /api/jack    -> 0    register "jack" doesn't exist so 0
POST   /api/jack 32 -> 32   creates register "jack" as 0 and adds 32
POST   /api/jack  4 -> 36   adds 4 to register "jack"
GET    /api/jack    -> 36   shows value of register "jack"
GET    /api/foo     -> 0    register "foo" doesn't exist so 0
POST   /api/foo   4 -> 4    creates register "foo" as 0 and adds 4
GET    /api/foo     -> 4    shows value of register "foo"
PUT    /api/jack  0 -> 0    resets register "jack" to 0
GET    /api/jack    -> 0    shows value of register "jack"
GET    /api/foo     -> 4    shows independent value of register "foo"
DELETE /api/foo     -> ok   deletes register "foo"
GET    /api/foo     -> 0    register "foo" doesn't exist so 0
```

The implementation must use **Cloud SQL or Datastore** to save the values.

You can download and use a test client page that checks that the API works as expected.