As discussed, please find below the test:

1. create a sqllite3 instance on local box -**- Complete**
2. create a table with name, email, address, date of birth, SSN -- **- Complete**
3. create a REST API driven service to perform CRUD operations on this table - payload should be in JSON. Applicant has full liberty to design the API no restriction on how to code and run the service - feel free to use Python or C# or Java or Ruby. That said you must provide explicit instructions as to how to start and stop this service
4. create a small client side app to hit the service
5. run a loop in the client side app and hit the service continuously - the aim is to monitor the service slowing down in face of the incessant hits
6. design a monitoring setup around how you will check for the incessant hits - you can use a statsd server and a graphite for UI but no constraints here. You can use anything else you want to like collectd or redis for the same purpose
7. design a monitoring solution for start and stop of this service - you could use consul or etcd or anything else but just remember the same code must be scalable to monitor 100 services
8. you must provide a documentation of the work, and total code for this exercise should be < 60-70 lines. no need for perfect code, something basic and functional is enough; we will check the approach

GIT Repository Link:

<https://github.com/aijazkazi82/Python_Rest_Project.git>

Database Details:

Name: TestDB.db

Table Name: employee

SQL Queries:

CREATE TABLE employee (

employee\_id integer PRIMARY KEY,

first\_name text NOT NULL,

last\_name text NOT NULL,

email text,

SSN text NOT NULL UNIQUE,

DOB text NOT NULL);

INSERT INTO employee (employee\_id,first\_name,last\_name,email,SSN,DOB)

VALUES (1,'Aijaz','Kazi','aijazkazi82@gmail.com', 'AK92242','1985-03-31');

pip install flask flask-jsonpify flask-sqlalchemy flask-restful