**PREPARING THE AZURE SERVER:**

Database Creation:

On azure it is installed a Linux machine, Ubuntu 12.04.3 LTS, so we will install a MySQL database manager on it.

First of all we need to connect to the Azure through ssh, so either Terminal(Linux and Mac) or Putty(Windows) need the same parameters, HostName, Port, and Password.

The exactly command to connect as root to Azure on terminal is:

- $ ssh -l root azureuser@[ServerAddress]

then a password is required.

After connecting successfully, a window that works as a Terminal is open and now you can start to work in it.

First thing needed is the MySQL:

-$ sudo apt-get install mysql-server

Then after installed you need to create a root password.

Now you can log in as root:

-$ mysql -u root -p

Now create a MySQL user:

mysql> CREATE USER ‘mysqluser’@’%’ IDENTIFIED BY ‘password’;

We are using the ‘%’ because we need that the user have access whatever IP address it has.

Now create a database

mysql> CREATE DATABASE [DatabaseName];

and grant to the user full permission to the database;

mysql> GRANT ALL PRIVILEGES ON [DatabaseName].\* TO ‘mysqluser’@'localhost' WITH GRANT OPTION;

mysql> CREATE USER ‘mysqluser’@'%' IDENTIFIED BY ‘password’;

mysql> GRANT ALL PRIVILEGES ON \*.\* TO ‘mysqluser’@'%' WITH GRANT OPTION;

Now the MySQL is installed and ready to be used. So you can quit.

mysql> quit;

To access the MySQL directly in the azure an endpoint needed so connect to the [Azure Manager Portal](http://manage.windowsazure.com/) and use this details of endpoint:

Name: MySQL

Protocol: TCP

Public Port: 3306

Private Port: 3306

Now you are almost ready to go, but to connect to the MySQL from any location you need to set the bind-address of MySQL. To do this you need to edit the file my.cnf located at /etc/mysql/my.cnf.

set this bind-address line to:

bind-address = 0.0.0.0

and execute a restart in the MySQL:

sudo service mysql stop

sudo service mysql start

You can now connect to the MySQL directly using the command:

-$ mysql -u [mysqluser] -p -h [azureaddress]

after that type the user password.  
  
You are now connected to the Azure database.

**PREPARING THE RASPBERRY:**

The connection software is implemented in Python and uses a library called MySQLdb, so for full functioning is needed to install both: Python 2.7 and MySQLdb.

To do so the following commands are required:

If the machine is a Linux or Linux based, the python came already installed, to verify just type:

~$ python

On terminal screen and your current version is going to open.

To instal the MySQLdb on the raspberry type this commands on terminal:

~$ sudo apt-get install python-pip

~$ sudo pip install -U pip

~$ sudo apt-get install python-dev libmysqlclient-dev

~$ sudo pip install MySQL-python

After these commands the program will be ready to run.