# Lab 2: Connecting with the dataset

In this lab you will use Power BI desktop to connect to the cloud!

In this lab the following actions will be performed:

* Connect to SQL Azure
* Create your first dataset
* Create your first report
* Create your first dashboard

## Azure

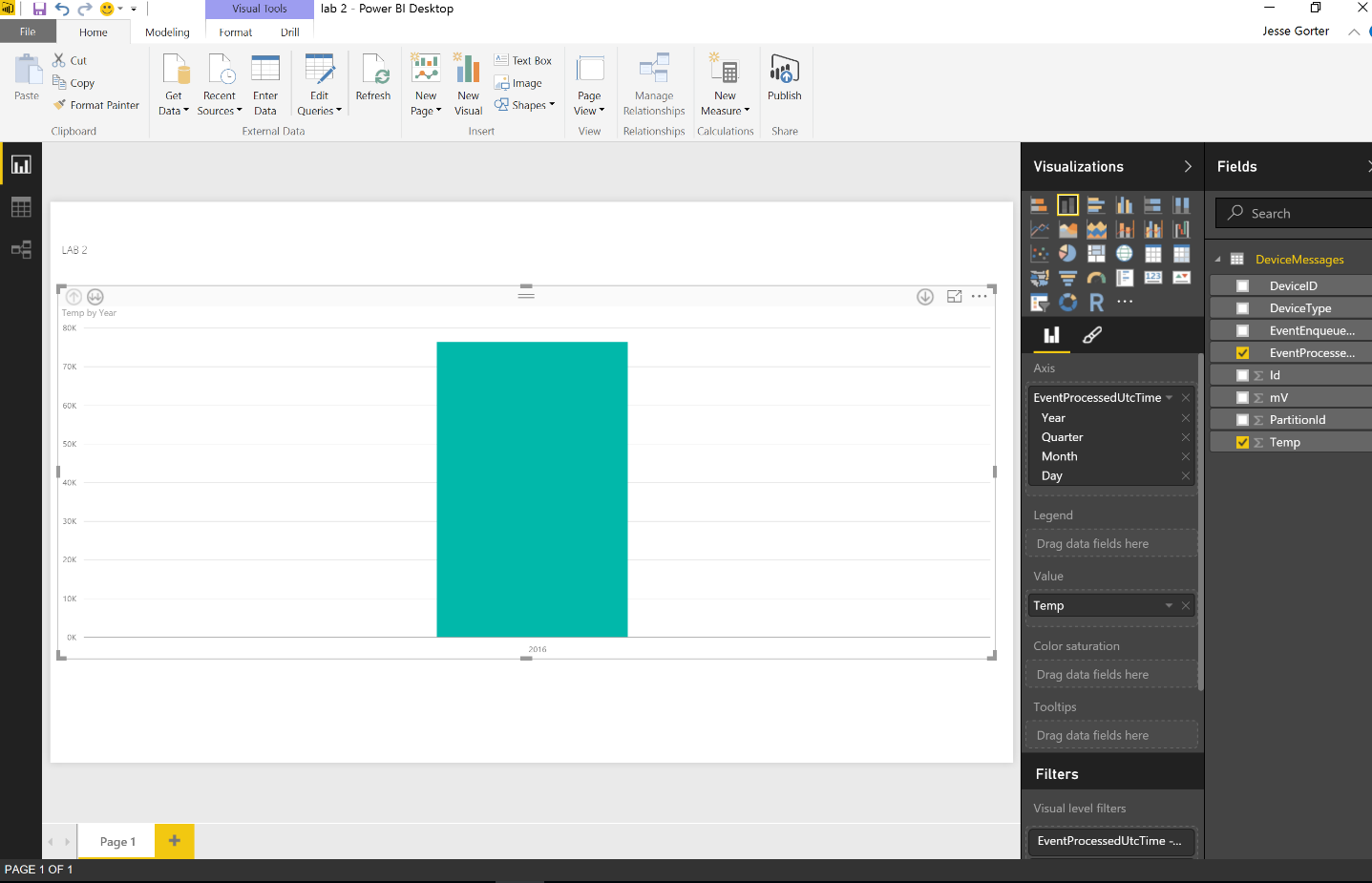
1. Open the desktop application
2. Choose ‘get data’
3. Click azure
4. Choose Microsoft Azure SQL Database
5. Click connect
6. As server type in the SQL Azure db you created and in the next steps the credentials that you created, if that is not possible you can choose : wifimonitor.database.windows.net
   1. The database : SensorDataDB
   2. Click “OK”. If you need to authenticate, use SQL authentication. Username: Student, password: pass@word1
7. Import the table DeviceMessages
8. Click Load
9. Save your report

Congratulations, you just connected to the cloud!

## Report

1. You are now automatically in the reporting area of Power BI.
2. Create a textbox in the topsection of your report.
3. Write ‘LAB2’ in there.
4. Click publish, to publish your report to Power BI in the cloud.
5. Choose to view it in [www.powerbi.com](http://www.powerbi.com)
6. See your report, available now in the cloud ☺
7. Open your mobile app, and try to render your report on your phone.

Now it is time to create some content for your report!

1. You can now choose to edit your report in [www.powerbi.com](http://www.powerbi.com), or to edit it in the desktop application. There is one caveat: you can not publish from the cloud to desktop, but you can the other way around. Also in the cloud you cannot typically change the connection to another server or database, but you can in the desktop application.
2. Try to create a stacked column chart using temp as value and the date on the axis. Tip: you have to set the X-axis as ‘categorial’. Result will look like this:  
     
   
3. Notice that you can drill down the date hierarchy. Drill down to the lowest level so it shows the temperature by date.
4. Copy and paste the visual and make sure the copy is a pie chart, also on the lowest level. Make sure the report page is divided between the column chart and the pie chart. What is your opinion on pie charts vs column charts? Which do you think is more useful?
5. Rename the page you are on as ‘Temperature by day’.
6. Create two more pages, ‘Temperature by month’ and one called ‘Temperature interaction’. The first one shows both charts the temperature by month. The last one is different, make sure the pie chart shows the month and the column chart per day. Click on one of the days…what happens? This is called visual interaction, and you can see how one element from one chart contributes to another. For example, clicking 31 will show that only July has data for this day.
7. Save your report and publish it to the cloud.
8. Open your report in powerbi.com
9. Choose to pin the two visuals from temperature overview page to a new dashboard to be called ‘Lab 2’.
10. Open the new dashboard and ask questions about the data!
11. Right click the data set you created for lab 2 and click ‘quick insights’.
12. See how power bi creates a new report for you!
13. Pin the visuals that you like to your dashboard.
14. Open your dashboard in your mobile phone.