How to create alternating measures

The best new skill I've learnt in THIS WEEK +tableau

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In this week's Makeover Monday I created a visualisation focusing on the sustainability of public transport around the world. Within the visualisation I wanted to replicate the design of a bus route; alternating stops left and right of a centre line. Here is how I did it:

1. Ensure you have a field that orders your data. In my Makeover Monday example I wanted cities ordered by the most sustainable so I created a RANK_UNIQUE table calculation:

   ```
   RANK_UNIQUE(max([Sustainable Cities Mobility Index]),'desc')
   ```
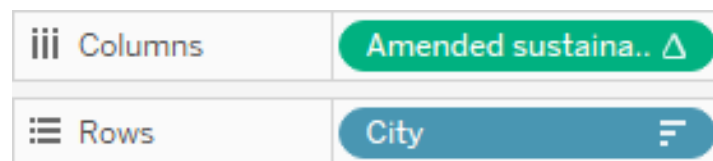
2. Create a calculated field that assigns each value to an 'Odd or Even', i.e. left or right of the centre line:

   ```
   iif(int([Rank])%2!=0,'Odd','Even')
   ```

3. Using the 'Odd or Even' calculation amend your measure to create alternating negative and positive values:

   ```
   if [Odd or even] = 'Even' then max([Sustainable Cities Mobility Index]) else -max([Sustainable Cities Mobility Index]) END
   ```

4. Place he amended measure value (3) into columns and your dimension into rows and sort your dimension by your measure value (if you required a sorted alternating viz):

EACH CITY IS RATED OVER 23 SUSTAINABILITY INDICATORS TO GIVE AN OVERALL RATING OF THE MOBILITY AND SUSTAINABILITY OF THE CITY'S TRANSPORTATION SYSTEMS.

1 — Hong Kong (65.3%)
Zurich (65.0%) — 2
3 — Paris (64.5%)
Seoul (64.4%) — 4
5 — Prague (64.3%)
Vienna (63.7%) — 6
7 — London (63.6%)
Singapore (62.7%) — 8
9 — Stockholm (62.7%)
Amsterdam (61.8%) — 10