# Project Assignment - Part 3

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## Introduction & Delivery Rules

In **Part 3** of the project you are required to answer some business questions on a datacube that you will create on the database you prepared. Document how you build your datacube in your report and solve the business questions using MultiDimensional eXpressions (MDX) in SQL management studio. Each group has to solve only the assignments on the corresponding group number page. Look at the section with your *groupid* to find which assignments you need to do. For the delivery prepare a folder with the name LDS_Part3_groupid. Since this is the **final delivery** each student must create a single folder named LDS_groupid containing the following folders:

- LDS_Part1_groupid containing the solutions to the assignments of the first part
- LDS_Part2_groupid containing the solutions to the assignments of the second part
- LDS_Part3_groupid containing the solutions to the assignments of the third part

Then, the student must compress the folder and create a single .zip file, named LDS_groupid.zip. Note that students can update the previous assignments and deliver the updated version. In this case, within the corresponding folder student must add a .txt file discussing the changes.

# Groups from 1 to 8

***Assignment 0***

Build a datacube from the data of the tables in your database, defining the appropriate hierarchies for time and geography. Use the *rank* and *rank points* of the winner and loser as measure.

***Assignment 1***

Show the total *winners* for each country and the grand total with respect to the continent.

***Assignment 2***

Show the total *winner rank points* for each year and the running yearly *winner rank points* for European players.

***Assignment 3***

Show the ratio between the total *winner rank points* of each year w.r.t the previous year.

***Assignment 4***

Create a dashboard that shows the geographical distribution of *winner rank points* and *loser rank points.*

***Assignment 5***

Create a plot/dashboard of your choosing, that you deem interesting w.r.t. the data available in your cube

# Groups from 9 to 16

***Assignment 0***

Build a datacube from the data of the tables in your database, defining the appropriate hierarchies for time and geography. Use the *rank* and *rank points* of the winner and loser as measure.

***Assignment 1***

Show the player that lost the most matches for each country.

***Assignment 2***

For each tournament, show the loser with the lowest total *loser rank points*.

***Assignment 3***

For each tournament, show the loser with the highest ratio between his *loser rank points* and the average *winner rank points* of that tournament.

***Assignment 4***

Create a dashboard that shows the geographical distribution of *winner rank points* and *loser rank points*.

***Assignment 5***

Create a plot/dashboard of your choosing, that you deem interesting w.r.t. the data available in your cube

# Groups from 17 to 26

***Assignment 0***

Build a datacube from the data of the tables in your database, defining the appropriate hierarchies for time and geography. Use the *rank* and *rank points* of the winner and loser as measure.

***Assignment 1***

Show the percentage increase in *winner rank points* with respect to the previous year for each winner

***Assignment 2***

For each country show the total *winner rank points* in percentage with respect to the total *winner rank points* of the corresponding continent.

***Assignment 3***

Show the *losers* having a total *loser rank points* greater than 10% of the totals *loser rank points* in each continent by continent and year.

***Assignment 4***

Create a dashboard that shows the geographical distribution of *winner rank points* and *loser rank points.*

***Assignment 5***

Create a plot/dashboard of your choosing, that you deem interesting w.r.t. the data available in your cube