1. Which district has the highest average price of the offers?

```
SELECT
{ [Measures].[average_final_price] } ON COLUMNS,
{
    [Kindergarten].[City].Members *
    TOPCOUNT({[Kindergarten].[District].Members }, 1, [Measures].[average_final_price])
} ON ROWS
FROM [ABC Adventure DW]
```

2. Does the contact rating affect the average price of the offers?

```
WITH
MEMBER [Measures].[CorrelationPriceRating] AS
    'Correlation(
        [Kindergarten].[Id Kindergarten].Members,
        [Measures].[average_final_price],
        [Measures].[average_contact_rating]
    )', FORMAT_STRING = "0.00000"

SELECT
{ [Measures].[CorrelationPriceRating] } ON COLUMNS
FROM [ABC Adventure DW]
```

3. What are the average prices for each care type?

```
SELECT
{ [Measures].[average_care_type_price] } ON COLUMNS,
{ [Junk].[Care Type].Members } ON ROWS
FROM [ABC Adventure DW]
```

4. What are the most popular care types in selected districts?

```
-- Define a new calculated member in the Measures dimension
WITH
MEMBER [Measures].[MostPopularCareType] AS
    -- The new member is defined as the name of the first member of a set
    'HEAD(
        -- The set is created by ordering another set
        ORDER(
            -- The other set is created by filtering the members of the Care Type dimension
            FILTER(
                [Junk].[Care Type].MEMBERS,
```

```
        -- The filter condition is that the name of the current member is not "All"
        [Junk].[Care Type].CurrentMember.Name <> "All"
    ),
    -- The ordering criterion is the Enrollment Count measure, in descending order
    [Measures].[Enrollment Count],
    BDESC
  ),
  -- The first member of the ordered set is selected
  1
).Item(0).Name'

-- Select the new calculated member on the columns axis
SELECT
{ [Measures].[MostPopularCareType] } ON COLUMNS,
-- Select the members of the District dimension on the rows axis
{ [Kindergarten].[District].MEMBERS } ON ROWS
-- Specify the cube to query
FROM [ABC Adventure DW]
-- Add a WHERE clause to limit the districts
WHERE (
  [Kindergarten].[City].[Warszawa]
)
```

5. Does the average age of the teachers affect the average price of the offer?

```
WITH
MEMBER [Measures].[CorrelationPriceAvgTeacherAge] AS
    'Correlation(
    [Kindergarten].[Id Kindergarten].Members,
    [Measures].[average_final_price],
    [Measures].[average_teacher_age]
    )', FORMAT_STRING = "0.00000"
SELECT
{ [Measures].[CorrelationPriceAvgTeacherAge] } ON COLUMNS
FROM [ABC Adventure DW]
```

6. How many children are enrolled each year?

```
SELECT
{ [Measures].[Enrollment Count] } ON COLUMNS,
{ [Enrollment Year].[Year].Members } ON ROWS
FROM [ABC Adventure DW]
```

7. **Which age group is least commonly enrolled in kindergartens where contact with employees is below average and what is the average age group price in those facilities?**

```
WITH
   MEMBER [Measures].[GlobalAverageContactRating] AS
      AVG([Kindergarten].[Id Kindergarten].MEMBERS,
[Measures].[average_contact_rating])
   SET [FilteredKindergartens] AS
      FILTER(
         [Kindergarten].[Id Kindergarten].MEMBERS,
         [Measures].[average_contact_rating] <
[Measures].[GlobalAverageContactRating]
      )
   MEMBER [Measures].[FormattedAverageContactRating] AS
      [Measures].[average_contact_rating], FORMAT_STRING = "0.00"
   MEMBER [Measures].[FormattedAverageAgeGroupPrice] AS
      [Measures].[average_age_group_price], FORMAT_STRING = "###0.00 zł"

SELECT
   {
      [Measures].[FormattedAverageContactRating],
      [Measures].[Enrollment Count],
      [Measures].[FormattedAverageAgeGroupPrice]
   } ON COLUMNS,
   [FilteredKindergartens] ON ROWS
FROM
   [ABC Adventure DW]
```

8. **Are there more children enrolled in kindergartens with higher (than the average) child development ratings each year?**

```
WITH
MEMBER [Measures].[AverageChildDevRating] AS
   'AVG(
      [Kindergarten].[Id Kindergarten].Members,
      [Measures].[average_child_dev_rating]
   )'
MEMBER [Measures].[FilteredEnrollmentCount] AS
   'SUM(
      FILTER(
         [Kindergarten].[Id Kindergarten].Members,
         [Measures].[average_child_dev_rating] >
[Measures].[AverageChildDevRating]
      ),
      [Measures].[Enrollment Count]
```

```
)'
SELECT
{ [Measures].[FilteredEnrollmentCount] } ON COLUMNS,
{ [Enrollment Year].[Year].Members } ON ROWS
FROM [ABC Adventure DW]
```

9. **What is the proportion of children enrolled in each age group and what is the average price of the specific age group?**

```
WITH
MEMBER [Measures].[TotalEnrollments] AS
    SUM(
        [Junk].[Age Group].[All],
        [Measures].[Enrollment Count]
    )
MEMBER [Measures].[EnrollmentProportion] AS
    [Measures].[Enrollment Count] / [Measures].[TotalEnrollments],
    FORMAT_STRING = "Percent"
SELECT
{ [Measures].[EnrollmentProportion], [Measures].[average_age_group_price] } ON
COLUMNS,
{ [Junk].[Age Group].Members } ON ROWS
FROM [ABC Adventure DW]
```

10. **Compare the number of enrollments in 2022 of the best 10 and the worst 10 kindergartens, in terms of overall grade.**

```
      a.) WITH
    SET [Top10Kindergartens] AS
        TOPCOUNT(
            [Kindergarten].[Id Kindergarten].Members,
            10,
            [Measures].[average_overall_rating]
        )
    MEMBER [Measures].[Rounded average_overall_rating] AS
        CSTR(ROUND([Measures].[average_overall_rating], 2))

    SELECT
      {
        [Measures].[Enrollment Count],
        [Measures].[Rounded average_overall_rating]
      } ON COLUMNS,
      {
        [Top10Kindergartens]
      } ON ROWS
    FROM
      [ABC Adventure DW]
```

```
WHERE
[Enrollment Year].[Year].&[2022]

        b.)WITH
          SET [Bottom10Kindergartens] AS
            ORDER(
              BOTTOMCOUNT(
                FILTER(
                  [Kindergarten].[Id Kindergarten].Members,
                  NOT ISEMPTY([Measures].[average_overall_rating]) AND
[Measures].[average_overall_rating] <> 0
                ),
                10,
                [Measures].[average_overall_rating]
              ),
              [Measures].[average_overall_rating],
              BDESC
            )
          MEMBER [Measures].[Rounded average_overall_rating] AS
            CSTR(ROUND([Measures].[average_overall_rating], 2))

        SELECT
          {
            [Measures].[Enrollment Count],
            [Measures].[Rounded average_overall_rating]
          } ON COLUMNS,
          {
            [Bottom10Kindergartens]
          } ON ROWS
        FROM
          [ABC Adventure DW]
        WHERE
          [Enrollment Year].[Year].&[2022]
```