Integrated Assignment Project Specification

Background

You will be analyzing the scores and percentages of the trainees in various modules. You will be doing the analysis for scores and percentages in various assessments such as Test, Retest, Hands on, and/or Comprehensive Examination.

ETL Section

Create a new database with the name 'Integrated Assignment'. This database will include the following tables. (You are free to make the table names more meaningful by prefixing them with 'Dim' or 'Fact'.)

1. Time (no need to create; load directly from the data provided).
2. Assessment (to be created)
3. Modules (to be created)
4. Trainees (to be created)
5. Score (to be created)

Table Details:

Trainees Table: Column Name	Data Type	Description
EmpKey	Int	Primary Key
EmpNumber	Int	Not Null
EmpName	Varchar(255)	Not Null
BatchName	Varchar(50)	Not Null
Stream	Varchar(10)	Not Null
IBU	Varchar(4)	If Emp Number is less 100150 then assign SI else TRPU

Assessment Table

Column Name	Data Type	Description
AssessmentKey	Int	Primary Key
AssessmentType	Varchar(100)	Not Null
DurationInMins	Int	Not Null

Modules Table

Column Name	Data Type	Description
ModuleKey	Int	Primary Key
ModuleName	Varchar(100)	Not Null
ModuleCreditPoints	Int	Not Null

Score Table

Column Name	Data Type	Description
ScoreKey	Int	Primary Key
AssessmentKey	Int	Not Null
ModuleKey	Int	Not Null

EmpKey	Int	Not Null
TimeKey	Int	Not Null
TotalScore	Int	Not Null
MaximumScore	Int	Not Null
Percentage	Int	Not Null

Note: Take care of data conversions. All data types should be non-Unicode.

Every package must contain XML & error logs.

Take care of surrogate keys in dimensions and fact.

MDDM Section

You need to create the cube for analysis.

1. Identify four dimensions for the cube.
2. One of the dimensions is Time. Consider only calendar related attributes and create a calendar hierarchy.
3. Identify one measure group for the cube.
4. Identify three measures for the cube.

ER Section

Create the following reports:

1. Chart Report:

This report has to be built by extracting data from the "Integrated Assignment" database.

Module Names on the X-axis, Percentage Scored in the Various Modules on Y-axis. Use a bar chart.

Take "Emp Name" as the input parameter. Take values of the parameter from the drop down list.

Take "Assessment Type" as input parameter with available values as "Test" and "Retest" in drop down list.

2. Table Report:

This report needs to be created from the Integrated Assignment Cube design in the MDDM section.
Details to display:

1. Year
2. Quarter
3. Month
4. Module name of the assessment conducted in the current month
5. Assessment type of the module conducted in the current month

Enable drill down for "Year," "Quarter, and "Month."

Note: For both reports, the name of the report should be present in the header. In the footer, the current date should be displayed on the left hand side and page number should be displayed on the right hand side.