

## Homework Week #1

### PL/SQL Virtual Training

1. Circle the programming language meeting the criteria

3GL	PL/SQL	SQL
4GL	PL/SQL	SQL
Is proprietary to Oracle Corporation	PL/SQL	SQL
Nonprocedural	PL/SQL	SQL
Procedural	PL/SQL	SQL
Is ANSI-compliant	PL/SQL	SQL

2. In your own words, describe why a procedural language like PL/SQL is needed.
3. Complete the following chart defining the syntactical requirements for a PL/SQL block:

	Optional or Mandatory?	What is included in this section?
DECLARE		
BEGIN		
EXCEPTION		
END;		

4. Which of the following PL/SQL blocks execute successfully? For the blocks that fail, explain why they fail

- A.        BEGIN  
          END;
- B.        DECLARE  
          amount INTEGER(10);  
          END;
- C.        DECLARE  
          BEGIN  
          END;
- D.        DECLARE  
          amount NUMBER(10);  
          BEGIN  
          DBMS\_OUTPUT.PUT\_LINE(amount);  
          END;

5. In Application Express:
  - A. Create and execute a simple anonymous block that outputs your name.
  - B. Create and execute a simple anonymous block that does the following:
    - Declares a variable of datatype DATE and populates it with the date that is six months from today
    - Outputs “In six months, the date will be: <insert date>.”
6. Write a SQL statement that will return data that looks like this:

COUNTRY	NATIONAL HOLIDAY
United Arab Emirates	Independence Day is 2-Dec
Republic of Azerbaijan	Founding of the Democratic Republic of Azerbaijan is 28-May
Republic of Armenia	Independence Day is 21-Sep
Commonwealth of Australia	Australia Day is 26-Jan
Republic of Austria	National Day is 26-Oct
Antarctica	is
Republic of Botswana	Independence Day is 30-Sep
Kingdom of Belgium	is 21-Jul
Peoples Republic of Bangladesh	Independence Day is 26-Mar
Republic of Bulgaria	Liberation Day is 3-Mar
Canada	Canada Day is 1-Jul
Republic of Chad	Independence Day is 11-Aug
Peoples Republic of China	Anniversary of the Founding of the Peoples Republic of China is 1-Oct
Republic of Chile	Independence Day is 18-Sep
Territory of Cocos (Keeling) Islands	Australia Day is 26-Jan
Republic of Colombia	Independence Day is 20-Jul
Republic of Cuba	Independence Day is 20-May
Paracel Islands	is
Spratly Islands	is
Republic of Poland	Constitution Day is 3-May

7. Due to a successful global health program, the life expectancy at birth will increase by 7 years for countries whose median ages are below 20. Display the current and increased life expectancy for these countries in the wf\_countries table. Name the calculated column “Improved Expectancy.”

8. Write a SQL statement that lists the country names in alphabetical order. Display the results in uppercase and give the column a heading of "NAME".
9. Display all the languages in the wf\_languages table that start with "f." Use the lowercase "f" in your SQL statement.
10. From the wf\_world\_regions table, display the ID, name, and an abbreviation that is the first three characters of the region name.
11. Modify your SQL statement so that the abbreviation is the first three characters of the region name followed by the length of the region name. For example: Western Asia would be Wes12.
12. Display all country names from the wf\_countries table, along with the life expectancy, rounded to the nearest whole number.
13. Write a SQL statement to list country names and capitals. If the capital is null, display it as "none listed."