Exercise # 1

1) Write a program to declare 3 variables with datatype as below and display their values.

    - Number
    - Varchar
    - Date

2) Write a program to check for a salary value and display the output based on the salary range (use IF condition)

- if salary is greater than 100000 then display the output as 'Grade A'
- if salary is between 50000 and 100000 then display the output as 'Grade B'
- if salary is between 25000 and 50000 then display the output as 'Grade C'
- if salary is between 10000 and 25000 then display the output as 'Grade D'
- otherwise display the output as 'Grade E'

3) Write a program using the same conditions as in the #1 question, but use CASE condition instead of IF condition.

4) Write a program to display values from 200 to 300 using a WHILE loop.

5) Write a program to display values from 200 to 300 using a FOR loop.

6) Write a program to perform below steps

    - Declare a variable
    - If the variable value is 1 then display values from 300 to 400 using a WHILE loop
    - If the variable value is 2 then display values from 400 to 800 using a FOR loop
    - If the variable value is 3 then just display “wrong choice”

Answers

1)

```
DECLARE
   A   NUMBER  := 10;
   B   VARCHAR2 (100) := 'Training course';
   C   DATE := TO_DATE ('01-JAN-2016', 'dd-mon-yyyy');
BEGIN
   DBMS_OUTPUT.PUT_LINE (A);
   DBMS_OUTPUT.PUT_LINE (B);
   DBMS_OUTPUT.PUT_LINE (C);
END;
```

2)

```
DECLARE
   SAL   NUMBER  := 10000;
BEGIN
IF SAL > 100000 THEN
   DBMS_OUTPUT.PUT_LINE ('Grade A');
ELSIF SAL BETWEEN 50000 AND 100000 THEN
   DBMS_OUTPUT.PUT_LINE ('Grade B');
ELSIF SAL BETWEEN 25000 AND 50000 THEN
   DBMS_OUTPUT.PUT_LINE ('Grade C');
ELSIF SAL BETWEEN 10000 AND 25000 THEN
   DBMS_OUTPUT.PUT_LINE ('Grade D');
ELSE
   DBMS_OUTPUT.PUT_LINE ('Grade E');
END IF;
END;
```

3)

```
DECLARE
   SAL   NUMBER  := 10000;
BEGIN
CASE WHEN SAL > 100000 THEN
   DBMS_OUTPUT.PUT_LINE ('Grade A');
WHEN SAL BETWEEN 50000 AND 100000 THEN
   DBMS_OUTPUT.PUT_LINE ('Grade B');
WHEN SAL BETWEEN 25000 AND 50000 THEN
   DBMS_OUTPUT.PUT_LINE ('Grade C');
WHEN SAL BETWEEN 10000 AND 25000 THEN
   DBMS_OUTPUT.PUT_LINE ('Grade D');
ELSE
   DBMS_OUTPUT.PUT_LINE ('Grade E');
END CASE;
END;
```

4)

```
DECLARE
  I   NUMBER := 200;
BEGIN
WHILE I <= 300
LOOP
  DBMS_OUTPUT.PUT_LINE (I);
  I:=I+1;
END LOOP;
END;
```

5)

```
DECLARE
  I   NUMBER;
BEGIN
FOR I IN 200..300
LOOP
  DBMS_OUTPUT.PUT_LINE (I);
END LOOP;
END;
```

6)

```
DECLARE
  CHOICE   NUMBER:=3;
  I NUMBER:=300;
  J NUMBER;
BEGIN
IF CHOICE = 1 THEN
   WHILE I <= 300
   LOOP
     DBMS_OUTPUT.PUT_LINE (I);
      I:=I+1;
   END LOOP;
ELSIF CHOICE = 2 THEN
   FOR J IN 400..800
   LOOP
      DBMS_OUTPUT.PUT_LINE (J);
   END LOOP;
ELSIF CHOICE = 3 THEN
  DBMS_OUTPUT.PUT_LINE ('Wrong Choice');
END IF;
END;
```