Coalesce

- Coalesce takes two or more expressions and returns the first expression that is not-null from the list of expressions
- Ordering is important
- Only if all expressions are null then is the result null
- The datatypes cannot be dynamic

```
COALESCE(EXPRESSION_1, EXPRESSION_2…EXPRESSION_N)
```

NVL

- The NVL function replaces null values from an expression with a specified string. It takes 2 parameters, the expression and replacement string

- If the expression in the first parameter is a character then it converts the replacement string to a character

- If it is numeric then Oracle determines which argument has the highest numeric precedence, implicitly converts the other argument to that datatype, and returns that datatype.

NVL(EXPRESSION, REPLACEMENT_STRING)

GREATEST / LEAST

- The greatest function returns the greatest value in a list of expressions
- The least function returns the lowest value in a list of expressions
- The first expression is used to determine the data type

```
GREATEST(EXPRESSION_1, EXPRESSION_2…EXPRESSION_N)
```

```
LEAST(EXPRESSION_1, EXPRESSION_2…EXPRESSION_N)
```

PIVOT

- PIVOT allows you to rotate rows into columns in a table
- You cannot input a subquery to obtain your list with PIVOT

```
SELECT * FROM

( SELECT COL_1, COL_2.. COL_N FROM TABLE)

PIVOT (AGG_FUNC(COL_N) FOR COL_N IN (LIST));
```

This select statement returns your PIVOTED table

You must ensure you select all the columns you wish to retain in your query, along with the column used in the aggregation and the column that holds the values in the list

This is the column you want to aggregate

This is the column that you want to PIVOT

This is the list of distinct values in the pre-PIVOT column

TRIM

- TRIM enables you to trim leading or trailing characters (or both) from a character string

TRIM([LEADING|TRAILING|BOTH] trim_character FROM trim_source)

- If trim_character or trim_source is a character literal, then you must enclose it in single quotes

- The default trim_character is a whitespace. By default BOTH leading and trailing trim_characters are removed from the trim_source

LPAD, RPAD

- LPAD function pads the left side on an expression with a specific set of characters until it reaches its padded length

- RPAD function pads the right side on an expression with a specific set of characters until it reaches its padded length

LPAD(EXPRESSION, PADDED_LENGTH, PAD_CHARACTER)

RPAD(EXPRESSION, PADDED_LENGTH, PAD_CHARACTER)

UNPIVOT

- UNPIVOT transforms columns to rows, which is the opposite of PIVOT