

Conditional Logic

CASE Expressions and
COALESCE Function

Conditional Logic

- Database tables often contain codes
- Want to write queries that display the interpretation of these codes
- SQL conditional logic to the rescue

SQL CASE Expression

```
SELECT StdSSN,  
       ( CASE  
         WHEN (StdMajor = 'IS') THEN 'Info Sys'  
         WHEN (StdMajor = 'FIN') THEN 'Financial Mgmt'  
         ELSE 'Unknown'  
         END  
       ) AS Major  
FROM Student
```

STDSSN	MAJOR
123456789	Info Sys
124567890	Financial Mgmt
234567890	Unknown
345678901	Info Sys
456789012	Financial Mgmt
567890123	Info Sys
678901234	Unknown
789012345	Financial Mgmt
876543210	Info Sys
890123456	Info Sys
901234567	Info Sys

Simplified Syntax

```
SELECT StdSSN,  
    ( CASE StdMajor  
      WHEN 'IS' THEN 'Info Sys'  
      WHEN 'FIN' THEN 'Financial Mgmt'  
      ELSE 'Unknown'  
      END  
    ) AS Major  
FROM Student
```

Dealing with NULL

```
SELECT OFFERNO,  
       CASE WHEN FACSSN IS NOT NULL  
            THEN FACSSN  
            ELSE 'Unassigned'  
       END  
FROM Offering;
```

Dealing with NULL

```
SELECT OFFERNO,  
       COALESCE(FACSSN, 'Unassigned')  
FROM Offering;
```

The COALESCE function handles the previous CASE more succinctly.

Further Reading

- <http://www.sql-statements.com/sql-case.html>
- <http://modern-sql.com/feature/case>