

# SQL Course

## Structure of Embedded SQL Applications

- To illustrate the structure of an embedded SQL program.
- To introduce the embedded SQL constructs that a host language can contain; Declaratives and Statements.

**An embedded SQL program has the following structure:**

```
host language statement ..... host language statement ..... host language statement .....
                                exec sql statement
host language statement ..... host language statement .....
                                exec sql statement
host language statement ..... host language statement .....
```

Hence, an embedded SQL program consists of statements in a programming language (called the host language) and embedded SQL constructs.

Every static embedded SQL application consists of:

- Declaratives
- Statements

### Declaratives

Specified in the data declaration part of a program, let the host program and the database system exchange data values and other information. The SQL declarative is the SQL declare section.

A program may contain one or more SQL declare sections. They define the default character set and define host variables used in SQL statements.

Host variables declared in SQL declare sections are normal host program variables and may be referenced by host program statements without restriction.

### Statements

These appear in the procedural part of a program and specify operations on the content of a database (meta and data). These statements include:

- the **DECLARE CURSOR** statement
- the **WHENEVER** statement
- the **FETCH** statement
- etc etc