Module Summary: Essentials

Running a SAS Program

- Programs can be submitted by clicking the **Run** icon or pressing the F3 key.

- To run a subset of a program, highlight the desired statements first. If you are using SAS Studio, click the **Run** icon or press F3. If you are using SAS Enterprise Guide, click the arrow next to **Run** and click **Run Selection** or press F3.

- A program can create a log, results, and output data.

- Submitting a program that has run previously in Enterprise Guide or SAS Studio replaces the log, output data, and results.

- Submitting a program that has run previously in the SAS windowing environment appends the log and results.

Understanding SAS Syntax

- SAS programs consist of DATA and PROC steps, and each step consists of statements.

```
DATA ... ;
    other statements
RUN;
```

```
PROC ... ;
    other statements
RUN;
```

- Global statements are outside steps.

```
TITLE ... ;
```

```
OPTIONS ... ;
```

```
LIBNAME ... ;
```

- All statements end with a semicolon.

- Spacing doesn't matter in a SAS program.

- Unquoted values can be lowercase, upper case, or mixed case.

- Consistent program spacing is a good practice to make programs legible.

- Use the following automatic spacing features:

  SAS Studio: Click the **Format Code** icon.
  Enterprise Guide: Select **Edit** > **Format Code** or press Ctrl+I.

- Comments can be added to prevent text in the program from executing.

- Some common syntax errors are unmatched quotes, missing semicolons, misspelled keywords, and invalid options.

- Syntax errors might result in a warning or error in the log.

- Refer to the log to help diagnose and resolve syntax errors.