Exercise 1.1 – Function Tools

Learning Outcomes

Upon completion of this exercise, you will be able to:

- Demonstrate the use of Intellisense Autoprompt and the function list to access existing functions.

1. **Write a new Cicode function to calculate the area of a circle**

   i. Open the file **Training.ci** that was created in ***Exercise - How to Start the Cicode Editor*** (page 1).

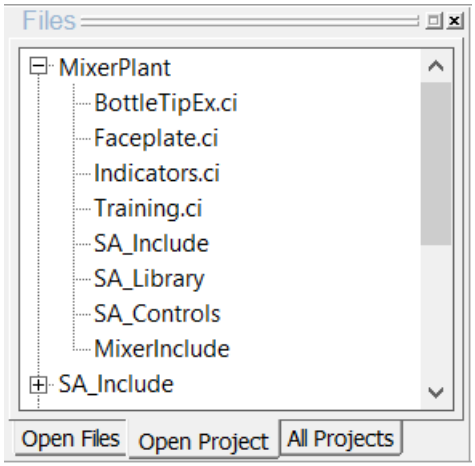
   ii. Create a simple function to calculate the area of a circle.

```
REAL
FUNCTION
AreaOfCircle(REAL rRadius)
 RETURN (3.1416 * Pow(rRadius,2));
END
```

   iii. Save the file and compile.

   iv. Close the file **Training.ci** and press the **Open Project** tab.

   v. Open the **MixerPlant** project tree and press **F5** to refresh the file list. Observe the file **Training.ci** will be listed.



   vi. Open the file **Training.ci** by double clicking the file name from the **Open Project** list. The name of the function will now be displayed in blue.

Exercise - Function Tools (cont.)

2. **Create a function to test the new user function AreaOfCircle().**

   i. Underneath the code for the **AreaOfCircle()** function type in this code.

   ```
   FUNCTION
   TestAoC( )
   ```

   ii. The next line of code will test the new user function **AreaOfCircle()**.

   ```
   FUNCTION
   TestAoC()
       AreaOfCircle(
   ```

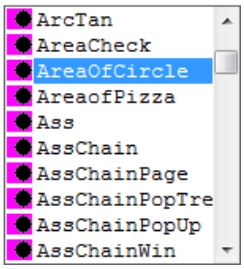
   REAL AreaOfCircle(REAL)

   iii. When the new function is typed with the opening bracket, the function appears as a tool tip.

   iv. Delete the text **AreaOfCircle()** from the line. This time right-click the line and select **List functions** from the menu.

   ```
   FUNCTION
   Test
   ```

   REAL AreaOfCircle(REAL)

   The inbuilt Cicode functions and any user functions that have been created (and compiled) will appear in the list. Clicking on one of the functions will display the complete function as a tool tip. Double click the **AreaOfCircle()** function to insert the function at the insertion point.

   v. Complete the function as follows:

   ```
   FUNCTION
   TestAoC()
    AreaOfCircle(20);
   END
   ```

3. **Save the file and compile.**