Assignments

Learning Objectives:

- Understand basic data types (numbers, strings) in TypeScript.
- Explore operators (assignment, arithmetic, comparison).
- Learn control flow statements (if/else, switch).
- Implement functions to reuse code.
- Introduce anonymous functions (function expressions).
- Understand anonymous functions.

Tasks:

1. Miles-to-Kilometers Converter (Operators):

- Create a variable named `miles` and assign a numeric value representing distance in miles.
- Calculate the equivalent distance in kilometers using the conversion factor (1 mile = 1.60934 kilometers). You can achieve this by multiplying `miles` by 1.60934.
- Store the converted distance in kilometers in a variable named `kilometers`.
- Use `console.log` to print a message in the following format:

  ```
  The distance of 130 kms is equal to 209.2142 miles
  ```

2.Evaluating a number game:

- Prompt the user to enter a number.
- Compare the entered number with a dynamic number value.
- Output the result indicating whether the entered number is greater than, equal to, or less than the dynamic number value.

3.Friend checker game:

- Prompt the user to enter a name.
- Use a switch statement to check if the entered name is a known friend.
- Output a confirmation message if the name is known, otherwise output a default response.

4.Functions:

- Set up two different variables with different values.
- Call a function with these variables as arguments and output the result using console.log.
- Create a second call to the function with two more numbers as arguments.

3.Calculator project using function:

- Set up two variables containing number values.
- Set up a variable to hold an operator (+ or -).
- Create a function that takes two numbers and an operator as parameters, performs the corresponding operation, and returns the result.
- Call the function with the variables and operator, and output the result using console.log.
- Update the operator value and call the function again with the updated arguments.

4.Anonymous functions:

- Assign a function expression to a variable, with one parameter that outputs the provided argument to the console.
- Pass an argument into the function.
- Create the same function as a normal function declaration.