Dart Assignment

1. Iterator & Iterable

Task:

- Create an Iterable that returns even numbers from 1 to 20 using an Iterator.
- Print all numbers.

2. Advanced Data Types (Map, Set, List)

Task:

- Create a program that stores student names and their grades using Map<String, int>.
- Print all names.
- Print the highest-grade using Map functions.
- Remove a specific student from the map.

3. Functions (Different Ways)

Task:

Write a program that calculates the area of a rectangle in different ways:

- 1. Using a normal function.
- 2. Using an arrow function.
- 3. Using an anonymous function.
- 4. Using a **higher-order function** (a function that takes another function as a parameter).

4. Stream

Task:

• Create a Stream that generates numbers from 1 to 5.

- Wait 1 second between each number.
- Print them in the main function.

5. Future & async/await

Task:

- Create a function that returns a Future with "Fetching data...".
- After 3 seconds, return "Data Loaded".
- Print the result in the main function using async/await.

6. Null Safety

Task:

- Create a program that asks for a username (String?).
- If the name is null, print "Guest".
- If the name is not null, print "Welcome, <name>".
- Try using ??, ??=,?...