**Dart Practice programs**

**Foundational Concepts & User Interaction**

1. **Let’s Talk, Dart!**  
   Write a Dart program that asks your name and favorite number, then prints a personalized greeting using both.
2. **Odd or Even Secret?**  
   Ask the user for a number and let Dart reveal whether it's odd or even—with a fun twist message.

**Loops & Sequences**

1. **What’s in the Series?**  
   Dart wants to build a series of numbers up to your input. Can you show all even numbers from 1 to that number?
2. **Multiply the Fun!**  
   Build a multiplication table generator. Input any number, and print its table up to 10.

**Conditions & Decision Making**

1. **The Number Oracle**  
   Can your program judge whether a number is positive, negative, or zero?
2. **Teen or Not?**  
   Create a program that checks if the given age is in the teenage range (13–19). Return a cool message.

**Math & Functions**

1. **Dart's Power Calculator**  
   Create a function that raises one number to the power of another (base and exponent given by user).
2. **Mystery Math Duel!**  
   Take two numbers from the user. Offer them choices to add, subtract, multiply, or divide—and show the result.

**List & Loop Challenges**

1. **Dart’s Shopping Cart!**  
   Ask the user to enter 5 item prices one by one. Store them in a list and print the total and average price.
2. **Guess the Smallest!**  
   Input a series of numbers (space-separated), then let Dart find and display the smallest.

**Date, Time & Duration**

1. **How Many Days Left?**  
   Let the user enter today’s date and a future goal date. Calculate and display the number of days remaining.

**Strings & Patterns**

1. **Spy Code Reverser!**  
   Input a secret message. Reverse the string and print it backwards.
2. **How Loud is Your Text?**  
   Count how many uppercase and lowercase characters are in a sentence entered by the user.

**Character Classification**

1. **Code Inspector 007**  
   Ask for a string and let Dart count how many are digits, alphabets, and special characters.

**Conversions & Utilities**

1. **From Meters to Magic**  
   Convert meters to feet and vice versa based on the user's choice.
2. **Temperature Spy Tool**  
   Ask for a temperature in Celsius. Convert it to Fahrenheit—and vice versa!
3. **Binary Decoder!**  
   Input a decimal number and convert it to binary. Also, try the reverse!

**Functions & Recursion**

1. **The Recursive Climber**  
   Write a recursive function to calculate the factorial of a number.

**Patterns and Visual Logic**

1. **Stairway of Stars**   
   Input a number. Print a right-angled triangle made of stars (\*) of that height.
2. **Mirror Numbers**  
   Input a number and print a diamond-shaped pattern using that number.

More programs can be seen at

https://github.com/Dataquark/Practice-Dart/tree/master/solutions