

Dart Compound Coding Exercises — Practice Sheet

10 Coding Exercises

Exercise 1:

1. a) Create a Dart file with a main function.
- b) Inside main, print your name and your age on two separate lines.
- c) Print a single string that contains both name and age using string interpolation.

Exercise 2:

2. a) Declare variables: String country, int year, double weight, bool likesCoding. Assign values.
- b) Print a sentence that includes all values using string interpolation.
- c) Change weight to a different value and print only the updated one.

Exercise 3:

3. a) Create String phrase = 'Learning Dart'.
- b) Print phrase.length, phrase.toLowerCase(), and phrase.contains('Dart').
- c) Trim spaces from String test = ' Dart ' and print the result.

Exercise 4:

4. a) Declare int x and double y with any values.
- b) Create num result = x + y; print it and also result.toDouble().
- c) Print results of x - 1, y * 3, and x / 2.

Exercise 5:

5. a) Declare two integers a and b.
- b) Print outcomes of comparison operators: a == b, a != b, a > b, a < b, a >= b, a <= b.
- c) Declare int sum = a + b; check if sum equals 20 and print the boolean result.

Exercise 6:

6. a) Create List animals with three values.
- b) Add a new animal, remove the last one, and update the second element.
- c) Print animals.first, animals.last, and animals.length.

Exercise 7:

7. a) Start with List numbers = [4, 4, 5, 6, 6, 7].

- b) Convert it to a Set to remove duplicates and print it.
- c) Use add(), remove(), and contains() with the set, printing each result.

Exercise 8:

- 8. a) Create a Map book = {'title': 'Dart Guide', 'pages': 120, 'price': 19.99}.
- b) Print book['title'], update price, and add a new key 'author'.
- c) Print all keys, values, and check if 'pages' exists as a key.

Exercise 9:

- 9. a) Create List< students with two items, each having name and grade.
- b) Print the grade of the second student using index and key.
- c) Add both grades and print the average grade as double.

Exercise 10:

- 10. a) Demonstrate var vs dynamic: assign dynamic value first as an int, then as a String, printing after each.
- b) Create var greeting = 'Hi'; change it to another String and print.
- c) Declare num pi = 3.14159; print pi.toInt() and pi.toStringAsFixed(3).