



## Task 1: Print Hello Message

Write a Dart program that prints "Hello, World!" to the console.

- Hint: Use the print() function inside the main() function.
- Output: Hello, World!

### Task 2: Use Variables

Create two variables, one for a name and one for age. Print a message that includes both.

- Hint: Use String and int types, and \$variableName inside the print statement.
- Output: My name is Amro and I am 25 years old.

### Task 3: Conditional Statement

Create a Dart program that checks if a person is allowed to enter based on their age (>=18).

- Hint: Use if and else to check the value of the age.
- Output: Not allowed

# Task 4: List and Loop

Create a list of three favorite programming languages and print each one on a new line.

- Hint: Use List<String> and a for-in loop.
- Output: JavaScript , PHP , Dart

## **Task 5: Map Object (Like Associative Array)**

Create a Map with a user's name, email, and city. Print each key and value.

- Hint: Use Map<String, String> and access keys using map['key'].
- Output: Name: Lina , Email: lina@example.com , City: Agaba

#### Task 6: Sum of Two Numbers

Write a Dart program that adds two numbers and prints the result.

- Hint: Use two int variables and add them using the + operator.
- Output: The sum is: 15

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# **Task 7: Multiplication Table**

Create a program that generates and prints the multiplication table for the number 5, multiplying it with each number from 1 to 10.

- Hint: Use a for loop to iterate through numbers 1 to 10 and Multiply 5 by each number in the loop and print the result in a formatted message.
- Output:  $5 \times 1 = 5$ ,  $5 \times 2 = 10$ ,  $5 \times 10 = 50$

#### Task 8: Even or Odd

Write a Dart program that checks if a given number is even or odd.

- Hint: Use the modulo operator % to check if the number is divisible by 2.
- Output: 7 is odd

# Task 9: List Length and Last Element

Create a list of numbers and print the number of items and the last item in the list.

- · Hint: Use .length and .last properties.
- Output: Total numbers: 4 , Last number: 20

## Task 10: Map Iteration

Create a Map with keys: id, title, and price. Print each key and its value.

- Hint: Use Map<String, dynamic> and map.forEach() method.
- Output: id: 101, title: Dart Course, price: 29.99

#### Task 11: Remove Duplicates from List

Create a list with duplicate values and print a new list without duplicates.

- Hint: Convert the list to a Set and then back to a list using .toList().
- Output: Original: [1, 2, 2, 3, 4, 4], Unique: [1, 2, 3, 4]

### **Task 12: Filter Even Numbers**

Given a list of integers, filter out the even numbers and print them.

- Hint: Use .where() with a condition n % 2 == 0.
- Output: Even numbers: [2, 4, 6]

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### Task 1: Calculate Total Cost and Check Even or Odd

Calculate the total cost of books by multiplying the number of books with the price per book. Then, use the modulus operator to check if the number of books is even or odd.

- Hint: Use the \* operator for multiplication, Use % to check if the number is even or odd.
- Output: Total cost: \$64.95 Is number of books even? false

# Task 2 : Calculate Average of Three Numbers

Calculate the average of three double values by adding them together and dividing by 3.

- Hint: Use + for addition and / for division and ensure the result is a double
- Output: Average: 18.333333333333333

### Task 3: Calculate Area and Perimeter of a Rectangle

Calculate the area and perimeter of a rectangle given its length and width.

- Hint: Use \* for area and + for perimeter.
- Output: Area: 52.5, Perimeter: 31.0

#### Task 4: Convert Celsius to Fahrenheit

Convert a temperature from Celsius to Fahrenheit using the formula: F = (C \* 9/5) + 32.

- Hint: Use the formula (celsius \* 9 / 5) + 32 to convert.
- Output: Temperature in Fahrenheit: 77.0

## Task 5: Check Even or Odd Using Ternary Operator

Use the ternary operator to check whether a given number is even or odd.

- Hint: Use the condition (number % 2 == 0) to check evenness.
- Output: The number is: Even

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