

Dart Programming Advanced Questions

Question 1

Write a Dart program that prints "Welcome to Dart programming!" to the console.

Question 2

Explain the purpose of the main function in a Dart application.

Question 3

Given the code snippet below, what will the output be? `dart void main() { print("Dart" + " " + "Programming"); }`

Question 4

How can you declare a variable in Dart to store a person's age and ensure it can only hold integer values? Write the code.

Question 5

What is the difference between var and dynamic in Dart? Provide an example of each.

Question 6

Write a Dart program that declares a variable with a double data type, assigns it a value of 12.5, and prints it to the console.

Question 7

Given this code, identify any errors and explain why they occur: `dart void main() { String name = "Alice"; name = 123; print(name); }`

Question 8

What is the difference between the num and double data types in Dart?

Question 9

Write code that declares a bool variable called `isLoggedIn` and assigns it a value of `false`. Then, change the value to `true` and print the result.

Question 10

Explain what happens if you try to use a variable before it is declared in Dart.

Question 11

How do you concatenate strings in Dart? Write an example using two variables: `firstName` and `lastName`.

Question 12

Identify the data type of each of the following values in Dart: `- 3.14` - `"Hello"` - `true` - `42`

Question 13

What will be the output of this code snippet? Explain your answer: `dart void main() { int x = 5; int y = x + 2 * 3; print(y); }`

Question 14

Write a Dart program that declares a String variable named `greeting` with an initial value of `"Hello"`. Then, update `greeting` to `"Hello, Dart!"` and print it.

Question 15

What does it mean for Dart to be a statically-typed language, and how does it impact the way variables are used?

Question 16

Write a Dart code snippet that demonstrates the use of an arithmetic operator to calculate the remainder of dividing 10 by 3.

Question 17

If you need a variable that can hold any type of value and may change during execution, which data type would you use? Write a code example to show this.