

(Notes) Currying

Question 1: Currying

Explanation: Currying is a technique in functional programming where a function with multiple arguments is transformed into a sequence of functions, each taking a single argument. This improves composability and allows partial application of functions.

Question 2: `sum(2)(6)(1)`

Explanation: This function demonstrates currying by taking three separate arguments and adding them together in a sequence using nested functions.

Question 4: Write a currying function `evaluate("sum")(4)(2)`

Explanation: This question showcases a curried function `evaluate` that takes an operation string and two numbers, then performs the corresponding operation (sum, multiply, divide, subtract) based on the string input.

Question 5: Infinite Currying -> `sum(1)(2)(3)...(n)`

Explanation: This example illustrates how currying can be used recursively to handle an indefinite number of arguments, continually adding them together until a termination condition is met.

Question 6: Currying vs Partial Application

Explanation: This question compares currying and partial application, showing how currying allows for creating reusable functions with specific arguments filled in, while partial application involves pre-filling some arguments and leaving others for later.

Question 7: Real-world example of currying => Manipulating DOM

Explanation: In this example, currying is used to create a function that updates the text content of an HTML element identified by its ID. This showcases a practical application of currying in web development for DOM manipulation.

Question 8: `Curry()` implementation

Explanation: This code snippet demonstrates a custom implementation of the `curry` function,

which transforms a multi-argument function into a curried function, enabling partial application and composability. It's applied to a simple sum function for demonstration.
