</i>tk

# Hiya Jain

## DWPS

### 7 - Amethyst

# Overview:

| | |
|---|---|
| **3** Exercise | **2.13** School Average |
| **21** Levels | **16.14** School Average |
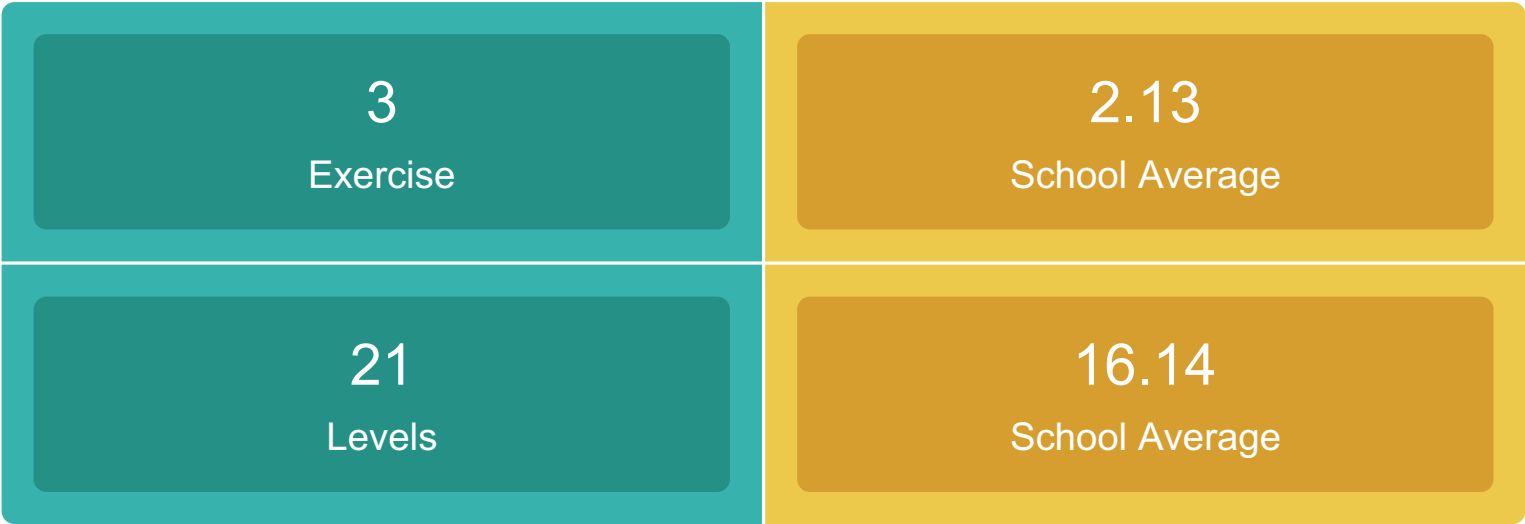
# Table:

### All exercises

| Exercise | Levels | Concepts | Blocks Used |
|---|---|---|---|
| Fun with Basics | 9/10 | Sequence, Algorithmic Thinking | 108 |
| Dog and the loops | 8/8 | Loops, Variables, Functions | 239 |
| Swamp conditionals | 4/4 | Conditional Statements, Loops, Variables, Sequence, Events, Functions, Decomposition, Algorithmic Thinking | 195 |

# List of Concepts:

## Decomposition

Breaking down a problem into smaller, more manageable parts.

Computational Thinking Concepts

## Pattern Recognition

Identifying similarities or patterns within problems.

## Abstraction

Simplifying complex problems by focusing on essential details and ignoring unnecessary information.

Computational Thinking Concepts

## Algorithmic Thinking

Developing step-by-step instructions or rules to solve a problem.

Computational Thinking Concepts

## Sequence

Understanding and writing instructions in a specific order.

Programming Concepts

## Variables

Introducing the concept of containers for storing information.

Programming Concepts

## Loops

Repeating a set of instructions multiple times.

Programming Concepts

## Conditional Statements

Making decisions in the program based on certain conditions.

Programming Concepts

## Events

Reacting to user inputs or specific occurrences in the program.

Programming Concepts

## Functions

Creating reusable blocks of code to perform specific tasks.

Programming Concepts

## Data Types

Introducing the idea of different types of data, such as numbers, text, and Boolean values.

Programming Concepts

# Input and Output

Understanding how programs receive information (input) and produce results (output).

Programming Concepts

# Debugging

Identifying and fixing errors or mistakes in the code.

Programming Concepts

# Comments

Adding explanations and notes within the code for better understanding.

Programming Concepts

# Event Handling

Responding to events triggered by user actions or other parts of the program.

Programming Concepts

# Graphics and Animation

Introducing basic concepts of drawing and creating movement in a program.

Programming Concepts

# Simulation

Creating virtual scenarios to model real-world situations.

Programming Concepts

# Collaboration

Encouraging teamwork and sharing of code with others.

Programming Concepts

# Iteration

Repeating a set of instructions or a process.

Programming Concepts