

The background is a dark blue field filled with various line-art icons in light blue and yellow. These include: a speech bubble with 'HTML 5', a speech bubble with 'JS', a speech bubble with binary code '01101000' and '01101001', a Python logo, a satellite, a globe, a computer monitor and tower, a keyboard, a magnifying glass, a group of stylized people, gears, a Wi-Fi symbol, a cloud, a planet with a ring, a network diagram, an '@' symbol, a smartphone, and the text '</>tk' in multiple locations.

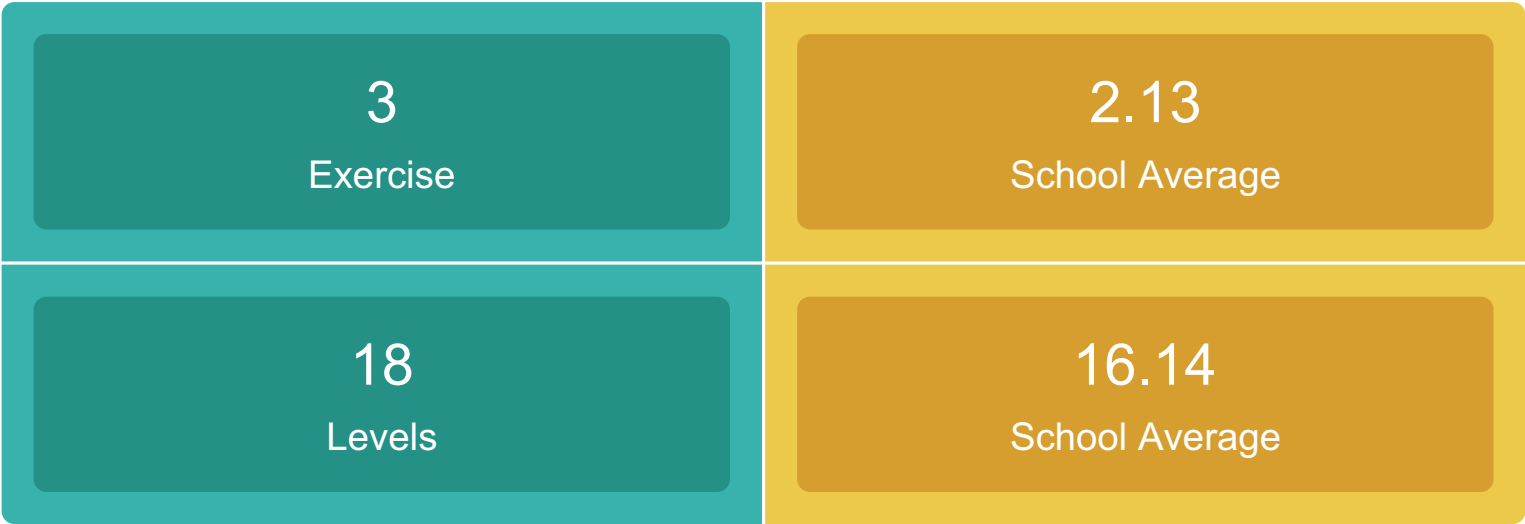
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# Overview:



# Table:

| All exercises           |        |  |             |
|-------------------------|--------|--|-------------|
| Exercise                | Levels | Concepts   | Blocks Used |
| Dog and the loops       | 8/8    | Loops, Variables, Functions  | 261         |
| Swamp conditionals      | 4/4    | Conditional Statements, Loops, Variables, Sequence, Events, Functions, Decomposition, Algorithmic Thinking | 79          |
| Predator bird functions | 6/7    | Conditional Statements, Loops, Variables, Sequence, Events, Functions, Decomposition, Algorithmic Thinking | 338         |

# List of Concepts:

## Decomposition

Breaking down a problem into smaller, more manageable parts.

Computational Thinking Concepts

# Pattern Recognition

Identifying similarities or patterns within problems.

Computational Thinking Concepts

# 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.

## Input and Output

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

## Debugging

Identifying and fixing errors or mistakes in the code.

## Comments

Adding explanations and notes within the code for better understanding.

## Event Handling

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

## Graphics and Animation

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

## Simulation

Creating virtual scenarios to model real-world situations.

## Collaboration

Encouraging teamwork and sharing of code with others.

## Iteration

Repeating a set of instructions or a process.