Solving Programming: A Seven-Step Approach

## Work example by hand

Solve small instances by hand

Unclear problem?

Need domain knowledge?

## Write down what you did

Write down exact steps

Just that instance

Tricky: Do without thinking

## Find patterns

Algorithm for any instance

Find patterns

Repetition, conditions, values

## Check by hand

Incorrect pattern? Find now

Check with different inputs

## Translate to code

Translate algorithm to code

Programming language

## Run test cases

Run test cases on code

Execute program

Check answer

Debug failed test cases

## Test failed? Debug

Use scientific method

Understand problems + fix

Timeline

Description automatically generated