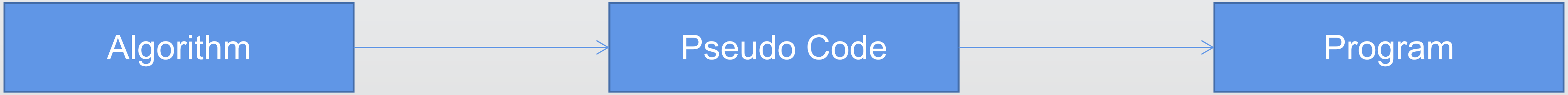
Pseudo Code

by wwy

What is pseudo code

- A Pseudocode is defined as a step-by-step description of an algorithm.
- Pseudocode does not use any programming language in its representation
- It uses the simple English language text as it is intended for human understanding rather than machine reading.
- Pseudocode is the intermediate state between an idea and its implementation(code) in a high-level language.



Algorithm

Pseudo Code

Program

Some principles

- Organize the sequence of tasks and write the pseudocode accordingly.
- At first, establishes the main goal or the aim.
- Write one statement per line.
- Use standard programming structures such as if-else, for, while, and cases the way we use them in programming.
- Indent the statements if-else, for, while loops as they are indented in a program, it helps to comprehend the decision control and execution mechanism. It also improves readability to a great extent.
- Consecutive statements in the same module are usually identified by consecutive numbers or letters. Labels may be omitted
- There are three kinds of loop statements: the while, repeat-until and for

Some principles

- The assignment statement is represented by the symbol ←
- The symbol ▵ is a comment symbol, followed by the content that has been commented
- Reserved commands or keywords must be represented in capital letters.
- Check whether all the sections of a pseudo code are complete, finite, and clear to understand and comprehend. Also, explain everything that is going to happen in the actual code.
- Don’t write the pseudocode in a programming language. It is necessary that the pseudocode is simple and easy to understand even for a layman or client, minimizing the use of technical terms.

Which is wrong?

```
For each index of string
    IF string(index) is equal to goal
        RETURN “It found”
    END IF
END FOR
```

```
For i=0 to end
    IF string(i) = goal
        RETURN “It found”
    END IF
END FOR
```

```
For each index of string
    if string(index) = goal
        RETURN “It found”
    END if
END FOR
```

```
For each index of string
    IF string(index) is equal to goal
        Get the answer
    END IF
END FOR
```

Which is wrong?

```
For each index of string
    IF string(index) is equal to goal
        RETURN “It found”
    END IF
END FOR
```

√

```
For i=0 to 20
    IF string(i) = “#”
        RETURN “It found”
    END IF
END FOR
```

✗

```
For each index of string
    if string(index) = goal
        RETURN “It found”
    END if
END FOR
```

✗

```
For each index of string
    IF string(index) is equal to goal
        Get the answer
    END IF
END FOR
```

✗

Example

```
QUICKSORT(Arr[], LOW, HIGH) {
   if (LOW < HIGH) {
       PIVOT = PARTITION(Arr, LOW, HIGH);
       QUICKSORT(ARR, LOW, PIVOT – 1);
       QUICKSORT(ARR, PIVOT + 1, HIGH);
   }
}
```

Thx :-)