

Algorithm Description – Sounds Fishy

In plain English, point-form, think through the steps necessary to solve the given problem.

Make use of key words like *compare*, *iterate*, *store*.

In code, of course, these translate to conditional statements, loops, and using variables.

Algorithm

INPUT

- iterate until a positive integer is provided
 - ask for and store the first reading in a variable
- iterate until a positive integer is provided
 - ask for and store the second reading in a variable
- iterate until a positive integer is provided
 - ask for and store the third reading in a variable
- iterate until a positive integer is provided
 - ask for and store the fourth reading in a variable

PROCESS

- see whether all of the following conditions are true:
 - first reading equals second reading
 - second reading equals third reading
 - third reading equals fourth reading
 - if so, save “Fish At Constant Depth” to output message variable
- otherwise see whether all of the following conditions are true:
 - first reading greater than second reading
 - second reading greater than third reading
 - third reading greater than fourth reading
 - if so, save “Fish Diving” to output message variable
- otherwise see whether all of the following conditions are true:
 - first reading less than second reading
 - second reading less than third reading
 - third reading less than fourth reading
 - if so, save “Fish Rising” to output message variable
- otherwise:
 - save “No Fish” to output message variable

OUTPUT

- print the output message to the screen