

Nested selections

Description: The picture to the right shows a very simple coin sorter, a device that has many algorithmic features we have seen in class: data storage, value increment, data input, result output, and conditions. The last ones are embedded within the device itself, and are needed to sort the coins.

Problem: Your job is to describe algorithmically the way the coin sorter works, i.e. how this specific device sorts the coins.

Hint: Notice that the coin sorter has no movable parts, namely, no machinery; therefore the “selection” is performed by a having a physical constrain (a “natural condition”) built-in the device itself.

