# What Table Do We Get?

Referenced from lesson [Table Methods](https://www.bootstrapworld.org/materials/spring2021/en-us/courses/data-science/lessons/table-methods/index.shtml) (Spring, 2021)

You have the following functions defined below :

fun lookup-fixed(animal): animal["fixed"] end  
fun is-dog(animal): animal["species"] == "dog" end  
fun is-old(animal): animal["age"] > 10 end  
fun nametag(animal): text(animal["name"], 20, "red") end

The table t below represents four animals from the shelter:

| **name** | **sex** | **age** | **fixed** | **species** | **pounds** |
| --- | --- | --- | --- | --- | --- |
| "Toggle" | "female" | 12 | true | "dog" | 48 |
| "Fritz" | "male" | 4 | false | "dog" | 92 |
| "Nori" | "female" | 6 | true | "dog" | 35.3 |
| "Sunflower" | "female" | 2 | false | cat | 51.6 |

Below is a list of expressions that use table methods. What table do we get, after evaluating each one? *Match* each expression to the table we get .

| **Code** | **#** | **What matches what?** | **L** | **Output** |
| --- | --- | --- | --- | --- |
| t.order-by("age", true) | **1** |  | **A** | Produces a table with Toggle, Fritz, and Nori - but not Sunflower. |
| t.order-by("pounds", false) | **2** |  | **B** | Produces a table of all four animals, sorted youngest-to-oldest |
| t.build-column("sticker", nametag) | **3** |  | **C** | Produces a table, with only Toggle. |
| t.filter(is-old) | **4** |  | **D** | Produces an identical table with an extra column called "dog", whose values are true, true, true, false |
| t.filter(lookup-fixed) | **5** |  | **E** | Produces a table containing only Nori and Toggle. |
| t.filter(is-dog) | **6** |  | **F** | Produces a table with all four animals, sorted from heaviest to lightest. |
| t.build-column("dog", is-dog) | **7** |  | **G** | Won’t run: will produce an error |
| t.filter(nametag) | **8** |  | **H** | Produces an identical table with an extra column called "sticker", whose values are images |

*These materials were developed partly through support of the National Science Foundation, (awards 1042210, 1535276, 1648684, and 1738598).  Bootstrap:Data Science by the* [*Bootstrap Community*](https://bootstrapworld.org/community/index.shtml) *is licensed under a* [*Creative Commons 4.0 Unported License*](https://creativecommons.org/licenses/by-nc-nd/4.0/)*. This license does not grant permission to run training or professional development. Offering training or professional development with materials substantially derived from Bootstrap must be approved in writing by a Bootstrap Director. Permissions beyond the scope of this license, such as to run training, may be available by contacting* [*contact@BootstrapWorld.org*](https://www.bootstrapworld.org/materials/spring2021/en-us/courses/data-science/lessons/table-methods/pages/mailto:contact@BootstrapWorld.org)*.*

Last updated 2021-10-12 13:35:39 -0400