# Booleans

Referenced from lesson [Simple Data Types](https://www.bootstrapworld.org/materials/spring2021/en-us/courses/data-science/lessons/simple-datatypes/index.shtml) (Spring, 2021)

**Boolean-producing expressions are yes-or-no questions and will always evaluate to either true (“yes”) or false (“no”).** What will each of the expressions below evaluate to? *Write down your prediction in the blanks provided and then type the code into the interactions area to see what it returns.*

|  | **Prediction:** | **Computer Returns:** |  | **Prediction:** | **Computer Returns:** |
| --- | --- | --- | --- | --- | --- |
| 1 3 <= 4 |  |  | 2 "a" > "b" |  |  |
| 3 3 == 2 |  |  | 4 "a" < "b" |  |  |
| 5 2 < 4 |  |  | 6 "a" == "b" |  |  |
| 7 5 >= 5 |  |  | 8 "a" <> "a" |  |  |
| 9 4 >= 6 |  |  | 10 "a" >= "a" |  |  |
| 11 3 <> 3 |  |  | 12 "a" <> "b" |  |  |

13 In your own words, describe what < does.

14 In your own words, describe what >= does.

15 In your own words, describe what <> does.

|  | **Prediction:** | **Computer Returns:** |
| --- | --- | --- |
| 16 string-contains​(​"catnap", "cat"​) |  |  |
| 17 string-contains​(​"cat", "catnap"​) |  |  |

| 18 How many **Numbers** are there in the entire universe? |  |
| --- | --- |
| 19 How many **Strings** are there in the entire universe? |  |
| 20 How many **Images** are there in the entire universe? |  |
| 21 How many **Booleans** are there in the entire universe? |  |

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