

iOS Course

Second class - conditionals, collections, loops

Conditionals

Conditionals

In computer science, conditional statements are features of a programming language, which perform different computations or actions depending on whether a programmer-specified boolean condition evaluates to true or false.

- if/else
- else if
- switch

Table 3.1 Comparison operators

| Operator | Description |
|----------|---|
| < | Evaluates whether the value on the left is less than the value on the right. |
| <= | Evaluates whether the value on the left is less than or equal to the value on the right. |
| > | Evaluates whether the value on the left is greater than the value on the right. |
| >= | Evaluates whether the value on the left is greater than or equal to the value on the right. |
| == | Evaluates whether the value on the left is equal to the value on the right. |
| != | Evaluates whether the value on the left is not equal to the value on the right. |
| === | Evaluates whether the two references point to the same instance. |
| !== | Evaluates whether the two references do not point to the same instance. |

Table 3.2 Logical operators

| Operator | Description |
|----------|--|
| && | Logical AND: true if and only if both are true (false otherwise). |
| | Logical OR: true if either is true (false only if both are false). |
| ! | Logical NOT: evaluates whether a condition is false (returns true for a false operand and vice versa). |

Conditional statements

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Collections

Collections

Swift provides three primary collection types, known as arrays, sets, and dictionaries, for storing collections of values.

- ***Arrays***- are ordered collections of values.
- ***Sets***- are unordered collections of unique values.
- ***Dictionaries***- are unordered collections of key-value associations.

| Collection Type | Ordered? | Unique? | Stores |
|------------------------|-----------------|----------------|-----------------|
| Array | Yes | No | Elements |
| Dictionary | No | Keys | Key-value pairs |
| Set | No | Elements | Elements |

Loops

Loops

Loops help with repetitive tasks. They execute a set of code repeatedly, either for a given number of iterations or for as long as a defined condition is met.

- *For*
- *While*

Challenges