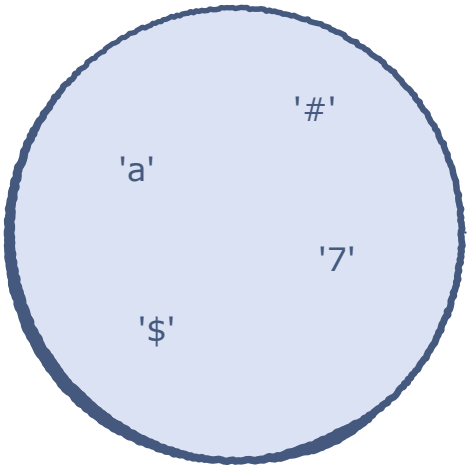
Characters

In this lesson, we'll learn about the features of characters.

WE'LL COVER THE FOLLOWING

Characters

> The character data type holds a single character enclosed in single quotation marks, e.g. `'a'`.



The world of characters.

A character occupies *1 byte* in memory.

It can be printed using the `print_char()` method.

Every character has a numerical ASCII value. Using `Js.log()` on a character will print its ASCII value.

```
print_char('b'); /* b */
Js.log(""); /* Next line */
Js.log('b'); /* 98: The ASCII value of b */

print_char('?'); /* ? */
Js.log(""); /* Next line */
Js.log('?'); /* 63 */
```

> **Note**: A character object can never contain more than one value. Therefore, values like `ab` or `#$%` are not allowed.

ASCII Values

Characters can be converted to and from their corresponding ASCII values, which implies that characters can be compared using operators.

The `Char.code()` method returns the ASCII value and `Char.chr()` retrieves the character from its ASCII value.

```
/* character to ASCII */
Js.log(10 * Char.code('b')); /* ASCII value of b is 98*/

/* ASCII to character */
print_char(Char.chr(98));

Js.log("");

/* Comparision */
Js.log('a' < 'e'); /* 97 < 101 -> true */
```

Next, we'll use characters to create a new data type.