hashscript: hash for use in written text

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1 Abstract

The word hashscript can refer to the textual notation that represents textual transform to embed numeric hash digits, and the word hashscript can also refer to the name of the JavaScript library containing such a textual transform implementation.

A series of numbers appearing in a segment of text, if written in a way that the chosen number would not change the meaning outside the text segment, could store parts of a numeric version of a hash. Each hash digit would need to be greater than or equal to two to use with plural nouns.

2 hashscript Notation

The hashscript notation represents numbers with placeholders to use as dynamic text that gets replaced with numeric hash digits. The dynamic form uses a variable syntax (i.e., "$A") before hashing the text segment. After hashing, each variable placeholder gets replaced with the corresponding hash digit number (i.e., "$A -> 6"; $B -> 9").

An example text segment in hashscript notation could be *"The team spotted $A dolphins, $B orcas, and $C jellyfish."*

3 hashscript Hash Format

The format of the hashscript hash would be space-separated numeric hash digits, i.e.,

```
6 10 11 9 4 3 10 10 2 8 11 5 4
```

4 JS Library Implementation

Excerpt 4.1: digest

```
import crypto from "crypto";
export function digest(hmac, text) {
  return crypto.createHmac("sha256", hmac).update(text).digest("hex");
}
```

Excerpt 4.2: getHashDigit

```
export function getHashDigit(hash, placeholder) {
  // HASH_ROUNDTRIP_VAR2LIT_FIX
  var varLetter = placeholder.charAt(1); // without preceding $
  var index = varLetter.charCodeAt() - "A".charCodeAt();
  return hash.split(" ")[index];
}
```