

# Digital Signature

Computational components for signing any objects

- [hash\[ \]](#) vs. [\[\]@](#) vs. [>\[\]](#)

# hash[ ] vs. ?@ vs. ?[ ]

A **hash code** is a fixed-size numerical value generated from input data of arbitrary size, used primarily for indexing data in hash tables. It allows for efficient data retrieval and storage by mapping variable-length data to a fixed-length representation.

Think of the hash code as a unique digital signature for any data that once even if one bit of that data altered the entire new hash code would be different.

**Example:** "dara is good lookin" has the hash code:

```
"0x05ee501e3232083ca0f16b02011944e735f78db170c568c2ea85e56380ddca05"
```

**Counterexample:** "dara is good lookin." the ending red dot cause an entire change to the has code above:

```
"0x4700eceb9e5cbc887ad3dea1833081d51c3572c7886ea9c8a3f30b0c5ad4c614"
```

```
hash1 = #@"dara is good lookin";  
hash2 = hash ["dara is good lookin"];  
hash3 = hash ["dara is good looking."];  
  
show hash1 also hash2 also hash3;  
  
save as crypto;
```

## Output

```
"hash1" → "(0x05ee501e3232083ca0f16b02011944e735f78db170c568c2ea85e56380ddca05)"
```

```
"hash2" → "(0x05ee501e3232083ca0f16b02011944e735f78db170c568c2ea85e56380ddca05)"
```

```
"hash3" → "(0x4700eceb9e5cbc887ad3dea1833081d51c3572c7886ea9c8a3f30b0c5ad4c614)"
```

## ?[ ]

```
hash4 = @@"dara is goodest at being good!";
```

```
show hash4;
```

```
save as crypto;
```

## Output

"hash4" → "(0x3b3791bf07902593e5a1500a79b56da6bfaf2c25b3c6c2959c6c69654745f8c0)"

## goodest

the word goodest is even gooder than the word good infact its [actually the bestest](#)

Source: <https://www.urbandictionary.com/>