

# **Hashes and Symbols**

#### **Ruby Symbols**

In Ruby, *symbols* are immutable names primarily used as hash keys or for referencing method names.

```
my_bologna = {
    :first_name => "Oscar",
    :second_name => "Meyer",
    :slices => 12
}

puts my_bologna[:second_name] # => Meyer

#Symbols must be valid Ruby variable names
and always start with a colon (:).
```

## Ruby Hashes, Symbols, & Values

In Ruby hashes, key symbols and their values can be defined in either of two ways, using a => or : to separate symbol keys from values.

```
my_progress = {
    :program => "Codecademy",
    :language => "Ruby",
    :enthusiastic? => true
}
#Key symbols and their values can be
defined with a =>, also known as a hash
rocket.

my_progress = {
    program: "Codecademy",
    language: "Ruby",
    enthusiastic?: true
}
#Key symbols and their values can also be
defined with the colon (:) at the end of
the symbol followed by its value.
```



### **Ruby .select Method**

In Ruby, the .Select method can be used to grab specific values from a hash that meet a certain criteria.

```
olympic_trials = {
   Sally: 9.58,
   John: 9.69,
   Bob: 14.91
}

olympic_trials.select { |name, time| time
   < 10.05 }

#The example above returns {:Sally=>9.58,
   :John=>9.69} since Sally and John are the
   only keys whose values meet the time <
10.05 criteria.</pre>
```

## Ruby .each\_key & .each\_value

In Ruby, the .each\_key and .each\_value methods are used to iterate over only the keys or only the values in a hash.

```
eren_jaeger = {
   age: 15,
   enemy: "titans",
   branch: "Survey Corps"
}

eren_jaeger.each_key { |key| puts key }
#Output:
#age
#enemy
#branch

eren_jaeger.each_value { |value| puts
value }
#Output:
#15
#titans
#Survey Corps
```