

Unless statement in Ruby.

```
#This construct requires a "number" variable to be less than
10 in order to execute:
print "Enter a number"
number = gets.to_i
unless number >= 10
  puts "number is less than 10."
end
```

An `unless` statement in Ruby is used to evaluate an expression. If the expression evaluates to `false`, then the code following `unless` is executed.

Ruby not Operator

```
data = true;

puts !data;

# Output: false
```

The `!` (not) operator in Ruby flips a boolean value. If a value is `true` then applying `!` to the value changes it to `false` and vice versa.

Comparison operators in Ruby.

```
a = 1;
b = 2;
c = 2;

puts a > b;
puts a < b;
puts b >= c;
puts a <= c;
puts b == c;

# Output:
# false
# true
# true
# true
# true
```

The following *comparison* or *relational* operators are used in Ruby to compare values.

> - greater than; < - less than; >= - greater than or equal to; <= - less than or equal to; == - equal to

if Statement in Ruby

```
number = 10
if number == 10
  puts "Your condition was true!"
end
```

An `if` statement in Ruby evaluates an expression, which returns either `true` or `false`. If the expression is `true`, Ruby executes the code block that follows the `if` whereas if the expression is `false`, Ruby returns nil.

In this example, the string `"Your condition was true!"` will print because the condition `number == 10` is true.

Else statement in Ruby.

```
if number > 50
  print "number is greater than 50"
else
  print "number is not greater than 50"
end
```

In Ruby, an `if` statement evaluates to either `true` or `false`. The code indented after the `if` portion is executed for `true` while the code indented after the `else` portion is executed for `false`.

And operator in Ruby.

```
if score1 > score2 && score1 > score3
  print "Score 1 is the greatest in value."
else
  print "Score 1 is not the greatest in value."
end
```

`&&` is a logical operator in Ruby which evaluates to `true` only if both expressions on either side of `&&` evaluates to `true`.

Or operator in Ruby.

```
grade1 = 50
grade2 = 30
grade3 = 80

if grade1 > grade2 || grade1 > grade3
  puts "Grade 1 is not the lowest score!"
end
```

The `||` (or) operator is a logical operator which returns `true` if either of the expressions on left-hand side or right-hand side is `true`.

`elsif` Statements in Ruby

```
print "enter a number: "
num = gets.chomp
num = num.to_i;

if num == 5
  print "number is 5"
elsif num == 10
  print "number is 10"
elsif num == 11
  print "number is 11"
else
  print "number is something other than 5, 10, or 11"
end
```

In Ruby, an `elsif` statement can be placed between `if` and `else` statements. It allows us to check for additional conditions.

More than one `elsif` can be placed between `if` and `else`.