

# **Control Flow in Ruby**

#### elsif Statements in Ruby

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 .

```
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
```

## **Ruby not Operator**

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.

```
puts !data;
# Output: false
```

data = true;

## Else statement in Ruby.

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.

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



## Comparison operators in Ruby.

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

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

```
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</pre>
```

a = 1;

#### Or operator in Ruby.

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

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

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

## if Statement in Ruby

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.

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



#### And operator in Ruby.

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

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

### Unless statement in Ruby.

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

```
#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
```