# STEP 1

# Point 1

1. This is bogus because:
   1. Every languages serves a purpose, they cannot be compared properly.
   2. This site doesn’t give the list of the most used languages or the “bests”, so it’s not objective.
2. Me and my partner know:
   1. C
   2. Java
   3. C++
   4. C#
   5. PHP
   6. Python
   7. JavaScript
   8. SQL
   9. MATLAB
   10. ADA
3. JavaScript (both of us)
   1. For one of us, it was a project to submit in a hurry. For the other, it was only to “better” a project created with PHP, XML and XSL.

# Point 2)

|  |
| --- |
| def map(a)  r = []  for i in a  a = yield(i)  r.push(a)  end  return r  end  map([1,2,3]) { |x| x \* x } |

# Point 3)

|  |
| --- |
| class Tree  attr\_accessor :children, :value  def initialize(value, children = [])  @value=value  @children=children  end  def visit(&block)  block.call(self)  children.each { |c| c.visit(&block) }  end  end  t = Tree.new(84,[Tree.new(7),Tree.new(12,[Tree.new(2),Tree.new(2),Tree.new(3)])])  sum = 0  t.visit {|n| sum = sum + n.value }  printf "There sum is %d\n", sum |

# Point 4)

1. T.class = Tree
2. A list of all the available methods

|  |
| --- |
| irb(main):046:0> t.methods  => [:children, :children=, :value, :value=, :visit, :nil?, :===, :=~, :!~, :eql?  , :hash, :<=>, :class, :singleton\_class, :clone, :dup, :taint, :tainted?, :untai  nt, :untrust, :untrusted?, :trust, :freeze, :frozen?, :to\_s, :inspect, :methods,  :singleton\_methods, :protected\_methods, :private\_methods, :public\_methods, :ins  tance\_variables, :instance\_variable\_get, :instance\_variable\_set, :instance\_varia  ble\_defined?, :remove\_instance\_variable, :instance\_of?, :kind\_of?, :is\_a?, :tap,  :send, :public\_send, :respond\_to?, :extend, :display, :method, :public\_method,  :define\_singleton\_method, :object\_id, :to\_enum, :enum\_for, :==, :equal?, :!, :!=  , :instance\_eval, :instance\_exec, :\_\_send\_\_, :\_\_id\_\_]  irb(main):047:0> |

1. The methods were:
   1. :children
   2. :children=
   3. :value
   4. :value=
   5. :visit
2. T.class.class gives : Class

t.methods.methods gives the methods (even those inherited from the “Class” class)

# Step 2

# Point 1)

Using « chomp » does not print the « \n ». So it hides the special characters.

# Point 2)