

# **Technological School “Electronic Systems” associated with Technical University Sofia**



## **Report:**

**What are the errors and how could this errors be  
avoided in the first place?**

*made by Kalin Marinov and Dimitar Matev (Team “Programmable Logics”)*

Date: 27.10.2014

## **Common Problems:**

### **Problem 1:**

Wrong output file (Ex.: results.csv, students.csv).

### **Problem 2:**

Not checking the format correctly

### **Problem 3:**

Writing more than ones same student (Ex.: FirstName\_SecondName\_1.rb and FirstName\_SecondName\_2.rb).

### **Problem 4:**

No sorting where it's required or it has wrong sorting.

### **Problem 5:**

Attempts to work with nil as string or number.

### **Problem 6:**

Wrong output file content.

**Other Problems:** Wrong variable names, False method usage, Too much unnecessary lines of code.

# Report for 11A class:

**Student: Borislav Rusinov**

**Code:**

```
a=ARGV[0]
require 'csv'
array=[]
Dir.glob("#{a}*.*)" do |my_text_file|
  name = my_text_file.split("/").last.split(".").first.split("_")
  if name[1]!=nil && name[0].length==10
    array << name[0] + "," + name[1]
  end
end
array.sort!
array.reverse!
File.open("results.csv", "w") do |csv|
  array.each do |arg|
    csv.puts(arg)
  end
end
```

**Comments:**

- 1) writing to a wrong csv
- 2) wrong check for name

**Quickfix:**

- 1) add after dir.glob next unless my\_text\_file =~ /[0-9a-zA-Z]+\_[0-9a-zA-Z]+\_\d+\.rb\z/ for name check
- 2) change results.csv to result.csv

**Rate: 4**

Student: Denis Trenchev

Code:

```
require 'csv'

i = 0
arr1 = []
arr2 = []
arr3 = []

Dir.glob(ARGV[0]+"*.rb") do |first_folder|
  name = first_folder.split('/').last.split('.').first.split('_')

  if name.length == 3
    if name[1].to_s.length == 5
      arr1[i] = []
      arr[i][0] = name[0]
      arr[i][1] = name[1]
      i+=1
    end
  end
end

i = 0

Dir.glob(ARGV[1]+"*.rb") do |second_folder|
  name = second_folder.split('/').last.split('.').first.split('_')

  if name.length == 3
    if name[1].to_s.length == 5
      arr1[i] = []
      arr[i][0] = name_1[0]
      arr[i][1] = name_1[1]
      i+=1
    end
  end
end

i = 0

arr1.each do |compare1|
  arr2.each do |compare2|
    if compare2 == compare1
      arr3[i] = compare1
      i+=1
    end
  end
end

sort = arr3.sort_by{|asd| asd[1]}
CSV.open("students.csv", "w") do |csv|
  sort.each do |element|
    csv << element
  end
end
```

**Comments:**

- 1) writing to a wrong csv, undefined local variable or method `arr' lines 31,32,45,46
- 2) undefined local variable or method `name\_1' at lines 45,46

**Quickfix:**

- 1) change csv to result.csv
- 2) change arr on lines 31,32 to arr1 and on lines 45,46 to arr2
- 3) change name\_1 to name at lines 45,46

**Rate: 3**

---

**Student: Dimitur Nestorov****Code:**

```
require 'csv'
def is_numeric(o)
  true if Integer(o) rescue false
end
array = []
count = 0
Dir.glob(ARGV[0] + "*.rb") do |file|
  name = file.split("/").last.split(".").first.split("_")

  name[0] = name[0].to_s
  name[0] = name[0].capitalize

  name[1] = name[1].to_s
  name[1] = name[1].capitalize

  if name.size == 3 && is_numeric(name[2])
    if name[1].length == 10

      array[count] = []
      array[count][0] = name[0].to_s
      array[count][1] = " #{name[1].to_s}"
      count += 1

    end
  end
end
array = array.sort_by {|e| -e[1]}
CSV.open("result.csv", "w") do |csv|

  array.uniq.each do |e|

    csv << e

  end
end
```

**Comments:**

- 1) undefined method `-'@' at line 41

**Quickfix:**

- 1) change line 41 to `array = array.sort_by {|e| e[1]}.reverse`

**Rate: 4****Student: Radoslav Konstadinov****Code:**

```
require 'csv'
file1 = Hash.new
file2 = Hash.new

path1 = ARGV[0]
path2 = ARGV[1]

Dir.glob("#{path1}*.rb") do |my_text_file|
  s = my_text_file.split(/\\/).last.capitalize
  first_name = my_text_file.split("/").last.split("_").first
  last_name =
my_text_file.split("/").last.split("_",2).last.split("_").first

  if s.count('_') == 2 and !((first_name == "" || first_name == " ") ||
(last_name == "" || last_name == " "))
    file1[first_name] = last_name
  end
end

Dir.glob("#{path2}*.rb") do |my_text_file|
  s = my_text_file.split(/\\/).last.capitalize
  first_name = my_text_file.split("/").last.split("_").first
  last_name =
my_text_file.split("/").last.split("_",2).last.split("_").first

  if s.count('_') == 2 and !((first_name == "" || first_name == " ") ||
(last_name == "" || last_name == " "))
    file2[first_name] = last_name
  end
end

CSV.open("result.csv", "w") do |csv|
  file1.sort.each do |first_name, last_name|
    file2.sort.each do |first_name1, last_name1|
      if first_name1 == first_name and last_name1 == last_name
        begin
          end
        else
          csv << [last_name1, first_name1]
        end
      end
    end
  end
end
```

```
end
```

**Comments:**

- 1) more than ones writing the same name

**Quickfix:**

- 1) after the file1.sort in csv.open the code should look something like this

```
check = true
file2.sort.each do |first_name1, last_name1|
  if first_name1 == first_name and last_name1 ==
last_name
    check = false
  end
end
if check
  csv << [last_name, first_name]
end
```

**Rate: 3**

**Student: Kristina Pironkova**

**Code:**

```
require 'csv'
results=Hash.new
Directory = ARGV[0]
Dir.glob("#{Directory}/*.rb") do |file_name|

    first_name = file_name.split("/").last.split("_").first.capitalize
    last_name=file_name.split("/").last.split("_",2).last.split("_").first.capitalize

    if first_name.length == 10

        results["#{last_name}"] = "#{first_name}"
    end

end

CSV.open("results.csv", "w") do |csv|
    results.sort.each do |first,last|

        csv << [last,first]
    end
end
```

**Comments:**

- 1) wrong output csv
- 2) not checking the file form

**Quickfix:**

- 1) change csv output to result.csv
- 2) add after dir.glob next unless file\_name =~ /[0-9a-zA-Z]+\_[0-9a-zA-Z]+\d+\.rb\z/ for file form

**Rate: 4**



**Student: Ivelin Slavchev**

**Code:**

```
require 'csv'
result = Hash.new
Dir.glob(ARGV[0] + "*").each do |file1|
  short1 = file1.split("/").last
  ext1 = short1.split(".").last
  names1 = short1.split(".").first
  digit1 = file1.split("_").last
  if (ext1 != "rb") or (digit1.to_i.to_s != digit1) or (short1.scan("_").count !=
2)
    result[short1] = short1.length
  end
end
Dir.glob(ARGV[1] + "*").each do |file2|
  short2 = file2.split("/").last
  ext2 = short2.split(".").last
  names2 = short2.split(".").first
  digit2 = file2.split("_").last
  if (ext2 != "rb") or (digit2.to_i.to_s != digit) or (short2.scan("_").count !=
2)
    result[short2] = short2.length
  end
end
result.sort_by{|k, v| v}
CSV.open("result.csv", "w") do |csv|
  result.each do |p|
    csv << p
  end
end
```

**Comments:**

- 1) undefined local variable or method `digit' at line 33
- 2) wrong checking for file form

**Quickfix:**

- 1) change digit at line 33 to digits
- 2) add after every dir.glob next if (file1 or file2) =~ /[0-9a-zA-Z]+\_[0-9a-zA-Z]+\_\.d+\.rb\z/ for file form

**Rate: 4**

**Student: Ivo Vulchev**

**Code:**

```
hash_fold1={}
hash_fold2={}

Dir.glob("#{ARGV[0]}*.*)" do |file|
  name = file.split("/").last.split(".").first.split("_")
  isNum = Integer(name[2]) rescue nil
  if name[0] and name[1] and name[0].length == 5 and !isNum!=nil
hash_fold1.include?(name[0])
    hash_fold1["#{name[1]}"] = "#{name[0]}"
  end
end
Dir.glob("#{ARGV[1]}*.*)" do |file|
  name = file.split("/").last.split(".").first.split("_")
  isNum = Integer(name[2]) rescue nil
  if name[0] and name[1] and name[0].length == 5 and !isNum!=nil
and!hash_fold2.include?(name[0])
    hash_fold2["#{name[1]}"] = "#{name[0]}"
  end
end
File.open("result.csv", "w") do |csv|
  hash_fold1.sort.map do |key, value|
    if (hash_fold1[key]==hash_fold2[key])
      csv.puts("#{key},#{value}")
    end
  end
end
end
```

**Comments:**

- 1) no 'and',! at line 23
- 2) no space at line 30 between 'and' and !hash\_fold2.include?(name[0])

**Quickfix:**

- 1) change digit at line 33 to digits
- 2) change at line 23 'and !hash\_fold1.include?(name[0])'
- 3) add space at line 30 between 'and' and !hash\_fold2.include?(name[0])

**Rate: 4**

**Student: Kalin Marinov**

**Code:**

```
require 'csv'

hash = Hash.new

Dir.glob("#{ ARGV[0] }/*") do |name|
  name = name.split("/").last
  short_name = name.split('_')[1]
  if short_name.length == 5
    hash[name] = short_name
  end
end

CSV.open("result.csv", "w") do |csv|
  hash = hash.sort_by { |key, value| value }.reverse
  hash.each |key| do
    csv << key
  end
end
```

**Comments:**

- 1) wrong sort
- 2) at line 31 'do' is on second place
- 3) not checking file form
- 4) wrong content of output file

**Quickfix:**

- 1) change digit at line 33 to digits
- 2) at line 31 change to hash.sort\_by {| k, v | k }.each do |key|
- 3) add after dir.glob next unless name =~ /[0-9a-zA-Z]+\_[0-9a-zA-Z]+\d+\.rb\z/
- 4) change line 32 to csv << [key[0].split("\_").first,key[1]]

**Rate: 3**

**Student: Lubomir Yankov**

**Code:**

```
require 'csv'
def is_numeric(o)
  true if Integer(o) rescue false
end

array = []
count = 0

Dir.glob(ARGV[0] + "*").each do |file|
  ch_count = 0
  file_name = file.split("/").last.split("")

  file_name.each do |ch|

    if is_numeric(ch)

      ch_count += 1

    end

  end

  if ch_count == 9
    len = file_name.length
    array[count] = []
    array[count][0] = file_name
    array[count][1] = len/2.round
    count += 1
  end
end

array = array.sort_by {|el| el[0]}
CSV.open("results.csv", "w") do |csv|

  array.each do |element|

    csv << element

  end

end
```

**Comments:**

- 1) wrong output file
- 2) wrong content in output file
- 3) counting 9 digits not 7

**Quickfix:**

- 1) change output file to result.csv
- 2) change at line 22 -> 9 to 7
- 3) change array.each loop to:

```
        array.each do |element|
            temp = ""
            element[0].each do |word|
                temp += "#{ word }"
            end
            csv << [temp,temp.length/2]
        end
```

**Rate: 2**

**Student: Petko Bozhinov**

**Code:**

```
require 'csv'

class String
  def numeric?
    Float(self) != nil rescue false
  end
end

output = Array.new
i = 0
Dir.glob(ARGV[0] + "/*") do |file|
  file = file.split('/').last.split('.').first.split('_')
  Dir.glob(ARGV[1] + "/*") do |file2|
    file2 = file2.split('/').last.split('.').first.split('_')
    if "#{file[0]} #{file[1]}" == "#{file2[0]} #{file2[1]}"
      if file[2].numeric?
        if file[0].to_s.length == 5
          output[i] = Array.new
          output[i][0] = file[0]
          output[i][1] = file[1]
          i+=1
        end
      end
    end
  end
end

output = output.sort_by{ |element| element[1]}
CSV.open("result.csv", "w") do |csv|
  output.each do |pusher|
    csv << pusher
  end
end
```

**Comments:**

- 1) not checking file form
- 2) wrong content csv output

**Quickfix:**

- 1) add after every dir.glob next unless (file or file2) =~ [0-9a-zA-Z]+\_[0-9a-zA-Z]+\_\\d+\\.rb\\z/

- 2) change line 46 to `output.uniq.each do |pusher|`

**Rate: 4**

**Student: Stanislav Valkanov**

**Code:**

```
require 'csv'
a = Hash.new
path = ARGV[0]
Dir.glob(path + "**/*.rb") do |my_text_file|
  short_name = my_text_file.split('/').last.split('.').first
  name = short_name.split("_")[0]
  last = short_name.split("_")[1]
  last.to_s
  if (last.length == 5)&&(short_name.split("_").size == 3)
    a["#{name}"] = last
  end
end
CSV.open("result.csv", "w") do |csv|
  Hash[a.sort.reverse].each do |element|
    csv << element
  end
end
```

**Comments:**

- 1) not full checking file form
- 2) if first name of a student is equal to first name of another student it count them as a one person

**Quickfix:**

- 1) add after `dir.glob` next unless `my_text_file =~ /[0-9a-zA-Z]+_[0-9a-zA-Z]+_\d+\.rb\z/`
- 2) use as a key first name + second name

**Rate: 4**

**Student: Stanislav Gospodinov**

**Code:**

```
require 'csv'
hash = Hash.new

Dir.glob("#{ARGV[0]}*.rb") do |file|
  filename = file.split('/').last.split('.').first;
  if filename.split('_').length == 3
    if filename.split('_')[1].length == 5
      hash[filename.split('_')[0]] = filename.split('_')[1]
    end
  end
end

hash = Hash[hash.sort_by{|k, v| v}]

CSV.open("results.csv", "w") do |csv|
  hash.each do |key, value|
    csv << [key, value].flatten
  end
end
```

**Comments:**

- 1) not full checking file form
- 2) wrong output file
- 3) if first name of a student is equal to first name of another student it count them as a one person

**Quickfix:**

- 1) change output file to result.csv
- 2) add after dir.glob next unless file =~ /[0-9a-zA-Z]+\_[0-9a-zA-Z]+\_\.d+\.rb\z/
- 3) use as a key first name + second name

**Rate: 4**



**Student: Simeon Shopkin**

**Code:**

```
require 'csv'

arr = Array.new
  Dir.glob(ARGV[0]+"/*.rb") do |first_files|
    Dir.glob(ARGV[1]+"/*.rb") do |second_files|
      first_files =
first_files.split("/").last.split(".").first.split("_")
      if first_files.size != 3
        if first_files != second_files
          print_count =
first_files.split("/").last.split(".").first
          p = print_count.size.to_s
          print =
first_files[0].capitalize+"_"+first_files[1].capitalize+"_"+first_files[2]+", "+p
          arr.push(print)
        end
      end
    end
  end

end

CSV.open("result.csv","w") do |csv|
  arr.sort.each do |element|
    csv << [element]
  end
end
```

**Comments:**

undefined method `split' at line 23

not full checking file form

at line 27 first\_files != second\_files will always be true

trying to split an array at line 29

if one person has more than two files it will save them both

**Quickfix:** more than half of the code must be fixed

**Rate:** 2

# Report for 11B class:

**Student: Borislav Stratev**

**Code:**

```
require 'csv'
a = Array.new
h = Hash.new
Dir.glob("#{ARGV[0]}/*.rb") do |dir_file_name_1|
  Dir.glob("#{ARGV[1]}/*.rb") do |dir_file_name_2|

    file_name_1 = dir_file_name_1.split(/\\/).last.to_s
    file_name_2 = dir_file_name_2.split(/\\/).last.to_s

    if(file_name_1 != file_name_2)
      file_name = file_name_1
      digit = file_name.split(/_/).last.split(/\.\/).first.to_s
      first_name = file_name.split(/_/).first.to_s
      full_first_name = first_name + digit
      full_first_name = full_first_name.to_s
      tmp = file_name.split("#{first_name}_")
      full_last_name = tmp.last.split(/_/).first.to_s + digit
      full_last_name = full_last_name.to_s
      h[full_last_name] = full_first_name
    end
  end
end

CSV.open("results.csv", "w") do |csv|
  a = h.sort
  a.each do |element|
    csv << element
  end
end
```

**Comments:**

- 1) no checks
- 2) wrong output file name("results.csv")
- 3) unnecessary actions
- 4) incorrect sorting

**Quickfix:** None

**Rate: 2**

**Student: David Georgiev**

**Code:**

```
require 'csv'
students_names = []
Dir.glob("#{ARGV[0]}/**/*.*rb") do |current_file|

    name = current_file.split('/').last.split(/_/)
    if name[1].length == 5
        if not students_names.include?("#{name[1]}", "#{name[0]}") then
            students_names << (["#{name[1]}", "#{name[0]}"])
        end
    end
end
CSV.open("result.csv", "w") do |csv|
    students_names.sort.each do |last, first|
        csv << ["#{first}", "#{last}"]
    end
end
```

**Comments:**

- 1) no checks for correct filename
- 2) error in .length method

**Quickfix:**

- 1) 20:if name[1].length == 5 -> if name[1].to\_s.length == 5

**Rate: 4**

Student: iliyan Germanov

Code:

```
require 'csv'
results = Hash.new
results.compare_by_identity
def is_number(str)
  str[/[0-9]+/] == str
end
Dir.glob("#{ARGV[0]}/*.rb") do |path1|
  filename1 = path1.split(/\/\//).last
  if filename1.count("_") == 2
    firstname1 = filename1.split("_").first
    lastname1 = filename1.split("_")[1]
    digit1 = filename1.split("_")[2].split(".").first
    if is_number(digit1)
      flag = 0
      Dir.glob("#{ARGV[1]}/*.rb") do |path2|
        filename2 = path2.split(/\/\//).last
        if filename2.count("_") == 2
          digit2 = filename2.split("_")[2].split(".").first
          if is_number(digit2)
            name1 = firstname1 + lastname1
            name2 = filename2.split("_").first +
filename2.split("_")[1]

            if name1 == name2
              flag = 1
              break
            end
          end
        end
      end
    end
    if flag == 0
      results[lastname1] = firstname1
    end
  end
end
end

CSV.open("result.csv", "w") do |csv|
  results.sort_by{|key, val| key}.each do |e1|
    csv << e1
  end
end
```

Comments:

- 1) not enough checks

**Quickfix:**

- 1) 25:if filename1.count("\_") == 2 -> if filename1 =~ /\A[0-9A-Za-z]+'\_[0-9A-Za-z]+'\_\d+.rb\z/
- 2) 33:if filename2.count("\_") == 2 -> if filename2 =~ /\A[0-9A-Za-z]+'\_[0-9A-Za-z]+'\_\d+.rb\z/

**Rate: 4****Student: Lili Karakoleva****Code:**

```
require 'csv'
student = Array.new
student1 = Array.new

Dir.glob(ARGV[0]+"/**/*.*).each do |file_name1|
  file_name = file_name1.split("/").last
  first_name = file_name.split("/").last.split("_").first
  p first_name
  last_name = file_name.split("/").last.split("_",2).last.split("_").first
  #task = file_name.split("_").last.split(".").first
  student << ["#{first_name}", "#{last_name}"]
end

Dir.glob(ARGV[1]+"/**/*.*).each do |file_name1|
  file_name = file_name1.split("/").last
  first_name = file_name.split("/").last.split("_").first
  p first_name
  last_name = file_name.split("/").last.split("_",2).last.split("_").first
  #task = file_name.split("_").last.split(".").first
  student1 << ["#{first_name}", "#{last_name}"]
end

CSV.open("result.csv", "w") do |csv|
  student.each do |fn, ln|
    student1.each do |fn1, ln1|
      if fn != fn1
        if ln != ln1
          csv << ["#{fn1}", "#{ln1}"]
        end
      end
    end
  end
end
```

**Comments:**

- 1) left extensions,no sorting,no duplicates removal
- 2) some unnecessary actions

**Quickfix:**

- 1) last\_name(\_1).split('.').first

- 2) 38:student1.each do |fn, ln| -> student.sort.uniq.each do |fn, ln|
- 3) 40:student.each do |fn1, ln1| -> student1.sort.uniq.each do |fn1, ln1|
- 4) checker (ch=0) after student.each becoming 1 if theres a file matching it at 40. and writing if it's 0

**Rate: 3**

**Student:Nikolay\_Mihailov**

**Code:**

```
require 'csv'
hash = Hash.new
count = 0
Dir.glob(ARGV[0] + "/*.rb") do |file|

    first = file.split(/\\/).last
    puts first

    #for (i = 0;i < first.length;i+=1)
    size = first.length
    i = 0
    first.each do |element|

        c = first[i].chr
        if element == 0 || element == 1 || element == 2 || element == 3 ||
element == 4 || element == 5 || element == 6 || element == 7 || element == 8 || element
== 9

            count +=1

        end

    end
    puts count

end

Dir.glob(ARGV[1] + "/*.rb") do |secFile|
    sec = secFile.split(/\\/).last
    #puts sec

end

CSV.open("result.csv", "w") do |csv|
    hash.sort_by{|key,val| key}.each do |element|
        csv << element
    end
end
```

**Comments:**

- 1) too C
- 2) not compiling
- 3) not finished

**Quickfix:** None

**Rate:** 1

**Student:** Stanislav Iliev

**Code:**

```
require 'csv'
name_array = Array.new()
name_array2 = Array.new()
support_array = Array.new()
support_array2 = Array.new()
i = 0
dir1 = ARGV[0]
dir2= ARGV[1]

Dir.glob("#{dir1}/*.*)" do |file|
  name_array[i] = file.split(/\\/).last
  i += 1
end
count = i
i = 0
Dir.glob("#{dir2}/*.*)" do |file2|
  name_array2[i] = file2.split(/\\/).last
  i += 1
end
i = 0
for check in i..count
  if name_array[check] != name_array2[check]
    support_array[i] = name_array[check]
    support_array2[i] = name_array2[check]
    i += 1
    puts support_array
    puts support_array2
    CSV.open("result.csv", "w") do |csv|
      support_array.each do |element|
        csv << [element]
      end
    end
    CSV.open("result.csv", "w") do |csv|
      support_array2.each do |element2|
        csv << [element2]
      end
    end
  end
end
end
```

**Comments:**

- 1) no checks for acceptable file
- 2) too C

- 3) checks are made only from one file to one other file. Impossible to determine if there's match without checking against all
- 4) There is overwriting so part of the data is lost

**Quickfix:**

- 1) involves rewriting the whole second half of the code

**Rate: 2**

**Student: Stefan Iliev**

**Code:**

```
require 'csv'

first_folder = ARGV.shift
second_folder = ARGV.shift || "err"
names_hash = Hash.new

Dir.glob(first_folder+"/*.*").each do |text_file|
  text_file = text_file.split("/").last
  if (text_file.split("_").length == 3) then
    first_name = text_file.split("_")[0]
    second_name = text_file.split("_")[1]
    diggit = text_file.split("_")[2].split(/\.\/).first
    if (diggit.to_i.to_s != diggit) then names_hash[text_file] =
text_file.length end
    if (first_name =~ /\d/) then names_hash[text_file] = text_file.length end
    if (second_name =~ /\d/) then names_hash[text_file] = text_file.length
  end
  else
    names_hash[text_file] = text_file.length
  end
end

if second_folder != "err"
  Dir.glob(second_folder+"/*.*").each do |text_file|
    text_file = text_file.split("/").last
    if (text_file.split("_").length == 3) then
      first_name = text_file.split("_")[0]
      second_name = text_file.split("_")[1]
      diggit = text_file.split("_")[2].split(/\.\/).first
      if (diggit.to_i.to_s != diggit) then names_hash[text_file] =
text_file.length end
      if (first_name =~ /\d/) then names_hash[text_file] =
text_file.length end
      if (second_name =~ /\d/) then names_hash[text_file] =
text_file.length end
    else
      names_hash[text_file] = text_file.length
    end
  end
end

names_hash = Hash[names_hash.sort_by{|k,v| k} ]
names_hash = Hash[names_hash.sort_by{|k,v| v} ]

puts names_hash
```



```
CSV.open("results.csv","w") do |csv|
  names_hash.each do |element|
    csv << element
  end
end
```

### Comments:

- 1) Writing in results.csv instead of result.csv
- 2) The code is a bit too longxx
- 3) Dir.glob gose to sub folders as well

### Quickfix:

- 1) 56:CSV.open("results.csv","w") do |csv| -> CSV.open("result.csv","w") do |csv|

Rate: 5

---

**Student: Valentin Varanov**

### Code:

```
students_first_dir = Array.new
students_second_dir = Array.new

for i in 0..1

  directory = ARGV[i]
  if ARGV[i].split(//).last(1).to_s == "/"
    directory += "**/*.rb"
  else
    directory += "/*.rb"
  end

  Dir.glob(directory).each do |dir|
    student = dir.split(//)
    if i == 0
      students_first_dir.push(student)
    else
      students_second_dir.push(student)
    end
  end
end

studentscsv = Array.new

students_first_dir.each do |std|
  match = 0
  students_second_dir.each do |std2|
    name = std.last.split(/_/)

    name2 = std2.last.split(/_/)
    for i in 0..1
      if name[i] == name2[i]
        match = 1
      end
    end
  end
end
```

```

        end
      end
      studentcsv.push(name[1], name[2])
    end
  CSV.open("result.csv", "w") do |csv|
    studentcsv.each do |string|
      csv << string
    end
  end
end

```

### Comments:

- 1) separately checking the first and the last name - theres possibility of equal first or last names but not the combination of the two
- 2) name and name2 are local arrays they must be declared earlier or they'll be out of scope
- 3) no require 'csv'
- 4) String passed to csv method << instead of array or hash
- 5) no last name sort
- 6) only writing first name to file

### Quickfix:

- 1) require 'csv'
- 2) name=[] name2=[] before inner loop
- 3) name check -> "#{name[0]} #{name[1]}" == "#{name2[0]} #{name2[1]}"
- 4) name sort -> studentcsv.sort\_by{|fn,ln| ln}

**Rate:** 3

**Student: Veselina Kolova**

**Code:**

```
require 'csv'

people = Hash.new

Dir.glob("#{ARGV[0]}/**/*.*").each do |text_file|

    if File.extname(text_file) text_file.include?(".rb") &&
text_file.split(/_/).last.split(/\.\/).first.to_i.is_a Integer then
        if (text_file.split("/").last.split("_").length == 3) then
            text_file = text_file.split("/").last
            if (text_file.split("_")[1].length == 5) then
                people[text_file.split("_")[1]] = text_file.split("_")[0]
            end
        end
    end

end

people = Hash[people.sort_by{|k,v| k}.reverse]

CSV.open("result.csv","w") do |csv|
    people.each do |element|
        csv << element
    end
end
```

**Comments:**

- 1) syntax errors
- 2) unnecessary if,
- 3) hash with key last name will remove people with same surnames

**Quickfix:** None

**Rate:** 2

**Student: Vladimir Yordanov**

**Code:**

```
names = Hash.new
Dir.glob (ARGV[0] + "*.rb") do |file|
  if (ARGV[1] == true)
    ARGV[1] == false
  end

  slice = file.split("/").last
  first_name = slice.split('_')[0]
  second_name = slice.split('_')[1]
  if (second_name.length == 5)
    #print first_name
    #puts second_name
    names[first_name] = second_name
  end
end

names = names.sort
puts names

require 'csv'
CSV.open("results.csv", "w") do |csv|
  names.to_a.each do |element|
    csv << element
  end
end
```

**Comments:**

- 1) unnecessary dealing with ARGV[1]
- 2) no format check
- 3) hash with key last name will remove people with same first names
- 4) writing in results.csv instead of result.csv
- 5) many variables

**Quickfix:** None

**Rate: 3**