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A picture containing text

Description automatically generated

Data Structures and Algorithms Homework #2

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**Why I choose Hashmap algorithm according to test I did it with Arraylist for count repeated words for file big it was take 40min ! but in Hashmap it few seconds just because the operators in HashMap is from Order 1 ,by HashMap you can assign each key(any type)by their value which was very useful for my program.**

Algorithm:

InputFile (args[0] )

If File.isFile

then

Scanner(O inputFile)

**Algorithm** HashMap <String , Integer > countword

For I ← 1 to (ReadFile.hasnext() do

Words[]←Split(“\n \t \r . , ; : ! ? () {} # @ \* - + \_ = ' 1 2 3 4 5 6 7 8 9 0 --”)

If repeated !=null

then

Repeated++

else

repeated←1

countword.put(word,repeted)

Set<Entry<String,Integer>> EntrySet

List<Entry<String,Integer>> list

if args[2] = des

then

PrintWiter v=new PrintWriter(args[1])

for I ← 1 to list.siz() do

v.write(list.get(i).toString()

print(countword)

if args[2] =”asc”

then

PrintWiter v=new PrintWriter(args[1])

for I ← 1 to list.siz() do

v.write(list.get(i).toString()

else print “error massage”