

Input:

#Four types of command

Text [ComponentID] [NaturalSize] [Shrinkability] [Stretchability] [Content]

GraphicalElement [ComponentID] [NaturalSize] [Shrinkability] [Stretchability] [Content]

ChangeSize [ComponentID] [NewSize]

Require [BreakStrategy]

Output:

·After ChangeSize command:

If NewSize < Shrinkability or Stretchability < NewSize:

Print("component [ComponentID] failed to change size")

Else:

Print("component [ComponentID] size changed to [NewSize]")

·After Require command:

// display layout in [BreakStrategy] format ...

·SimpleComposition Format: // display one component for each line

// component format is [[currentSize]][Content] e.g. [1]Hi

e.g.

[1]Hi

[1]<ParagraphEnd>

[1]nice

[1]to

[1]meet

[1]you

[1]scared.jpg

[1]<ParagraphEnd>

·TexComposition Format: // display all components before component with content <ParagraphEnd> in one line, split by space

e.g.

[1]Hi [1]<ParagraphEnd>

[1]nice [1]to [1]meet [1]you [1]scared.jpg [1]<ParagraphEnd>

·ArrayComposition Format: // display 3 components in one line, split by space

e.g.

[1]Hi [1]<ParagraphEnd> [1]nice

[1]to [1]meet [1]you

[1]scared.jpg [1]<ParagraphEnd>

Comment:

Please display components in input order.

There won't be any repeating [ComponentID], and there will only be existing [ComponentID] in ChangeSize command.

Arguments [NaturalSize], [Stretchability], [Shrinkability] and [NewSize] are guaranteed to be integers. [BreakStrategy] is limited to "SimpleComposition", "TexComposition" and "ArrayComposition".

Please implement your main function in Class Main.

We'll test your program through "java Main inputFile"

e.g java Main sampleInput

Do not read input from System.in or hard code input file, or your program won't pass any test case.

Upload:

Please zip your source code and upload it.

The file name should be Team[teamID].zip. e.g. Team7.zip

The folder structure should be:

unzip Team7.zip

=> [dir] Team7

=> Team7/*.java

You won't receive any point if you didn't follow the directory structure or main class name or compressed format!

#SampleInput:

Text 0 12 5 72 Hi
Text 1 1 1 1 <ParagraphEnd>
Text 2 12 5 72 nice
Text 3 12 5 72 to
Text 4 12 5 72 meet
Text 5 12 5 72 you
GraphicalElement 6 20 10 100 scared.jpg
Text 7 1 1 1 <ParagraphEnd>
ChangeSize 0 10
Require SimpleComposition
Require TexComposition
Require ArrayComposition

#SampleOutput:

component 0 size changed to 10
[10]Hi
[1]<ParagraphEnd>
[12]nice
[12]to
[12]meet
[12]you
[20]scared.jpg
[1]<ParagraphEnd>
[10]Hi [1]<ParagraphEnd>
[12]nice [12]to [12]meet [12]you [20]scared.jpg [1]<ParagraphEnd>
[10]Hi [1]<ParagraphEnd> [12]nice
[12]to [12]meet [12]you
[20]scared.jpg [1]<ParagraphEnd>