**Input:**

Create [DataStructure\_name] [DataStructure]

Add [DataStructure\_name] [Content]

Length [DataStructure\_name]

Size [DataStructure\_name]

Get [DataStructure\_name] [index]

GetNode [DataStructure\_name] [index]

PrintOutList [DataStructure\_name]

…

**Output:**

*//if [DataStructure] is List*

*//input: Length [DataStructure\_name]: print how many Strings*

[String\_num]

*//input: Size [DataStructure\_name]*

List do not have method size

// *input:* Get [DataStructure\_name] [index]: print content at [index]

[Content\_index]

// *input:* GetNode [DataStructure\_name] [index]

List do not have method getNode

*//input: PrintOutList [DataStructure\_name],* print all contents

[Content\_0]

[Content\_1]

…

*//if [DataStructure] is SkipList*

*//input: Length [DataStructure\_name]*

SkipList can not access length

*//input: Size [DataStructure\_name]: print how many SkipNode*

[SkipNode\_num]

// *input:* Get [DataStructure\_name] [index]

SkipList do not have method get

// *input:* GetNode [DataStructure\_name] [index] : print content at [index]

SkipNode:[Content\_index]

*//input: PrintOutList [DataStructure\_name],* print all contents

SkipNode:[Content\_0]

SkipNode:[Content\_1]

…

**Comment:**

[DataStructure] must be one of followings:

List

SkipList

You are asked to write a main function in Class Main

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

e.g java Main sampleInput

You should read input from file.

And show output to standard output.

**Upload:**

Please push your source code to the master branch of your team’s homework Gitlab repository.

The folder structure should be:

[dir] PrintOut

=> [dir] Team7

=> Main.java

=> \*.java (optional)

=> [name of test case].in

=> [name of test case].out

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

**sampleInput:**

Create abc SkipList

Add abc a

Add abc b

Length abc

Size abc

Add abc c

Get abc 0

GetNode abc 0

PrintOutList abc

Create list List

Add list a

Add list b

Length list

Size list

Add list c

Get list 0

GetNode list 0

PrintOutList list

Add list d

PrintOutList list

GetNode list 3

Get list 3

**sampleOutput:**

SkipList can not access length

2

SkipList do not have method get

SkipNode:a

SkipNode:a

SkipNode:b

SkipNode:c

2

List do not have method size

a

List do not have method getNode

a

b

c

a

b

c

d

List do not have method getNode

d