

COP 3330 9/2/26

~~1~~ Math Class (lang)

(2) Random Class (~~lang~~)^{util} Package - has several classes

(3) String class (lang) lang automatically import

import java.util.Random; // imports 1

import java.util.*; // imports all classes in util.

Math Class

static (ALL)
methods

static constants

Static - "belongs to the class"

to refer to something static DO

CLASSNAME. METHODNAME
CONSTANT

abs(int a);

abs(double a);

⋮
⋮
⋮

(Method overloading
SAME NAME
BUT DIFFERENT
PARAMETER LISTS

Random class

Here to create a Random object.

Random rndObj = new Random();

rndObj → (Object rndObj) ↑ ↑ ↘ parameters to build obj.
required keyword class name
default constructor (no params)

Methods are instance method

Instance - "belongs to the object"

To call an instance method, we

do

referenceName.METHODNAME

rndObj.nextInt(100)

Usually only create 1 obj, call nextInt, etc.

String class

multiple times on same object.

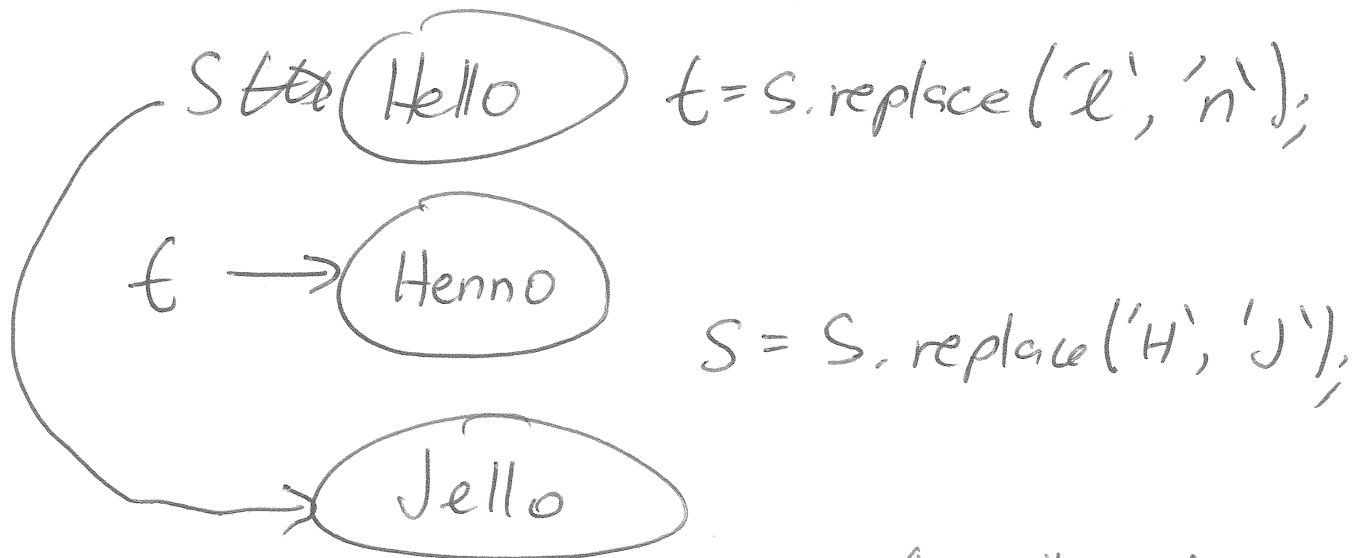
String s = "hello"; //String s = new String("hello");

String name = stdin.next();

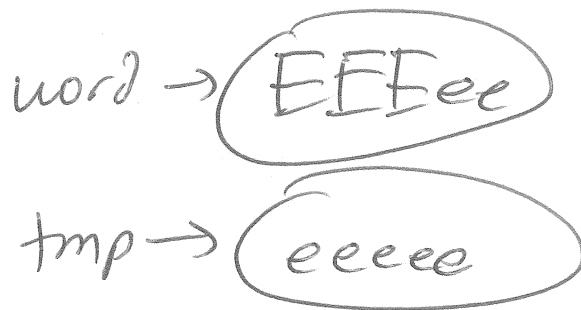
NOTE: nextLine, StringTokenizer, Integer.parseInt

String title = stdin.nextLine();

String objects are immutable !!!



In Java the object storing "Hello" gets garbage collected!



lexicographical ordering is by ASCII value

→ go char by char find first discrepancy. ASCII smaller comes first

temperature
tempe(s)t