

CSE 121 Final Cheat Sheet

Declaring and using arrays

```
type [] name = new type [length];
type [] name = new type []{VAL1, VAL2, VAL3, ...};
type [] name = {VAL1, VAL2, VAL3, ...};
name[index] = value;
name.length // Number of elements in array
```

String Method	Description
charAt(i)	returns character in this String at index i
contains(str)	returns true if this String contains str inside it
endsWith(str), startsWith(str)	returns true if this String ends/start with str
equals(str)	returns true if this String is the same as str
equalsIgnoreCase(str)	returns true if this String is the same as str , ignoring capitalization
indexOf(str)	returns the first index in this String where str begins (-1 if not found)
length()	returns the number of characters in this String
replace(str, new)	returns a new String with all str in this String replaced with new
substring(i)	returns characters in this String from index i (inclusive) to end (inclusive)
substring(i, j)	returns characters in this String from index i (inclusive) to j (exclusive)
toLowerCase()	returns a new String with all lowercase letters
toUpperCase()	returns a new String with all uppercase letters

Random Method	Description
nextInt(max)	random integer from 0 (included) to max (excluded)
nextInt(min, max)	random integer from min (included) to max (excluded)

Math Method	Returns
Math.abs(val)	returns the absolute value
Math.max(val1, val2)	returns the larger of two values
Math.min(val1, val2)	returns the smaller of two values
Math.pow(base, exp)	returns the base to the exp power
Math.sqrt(num)	returns the square root

Scanner Method	Description
hasNext()	returns true if there is a next token to read
hasNextLine()	returns true if there is a next line to read
hasNextInt()	returns true if there is a next token and it can be read as an int, false otherwise
hasNextDouble()	returns true if there is a next token and it can be read as an double, false otherwise
next()	returns one token as String
nextLine()	returns entire line as String
nextInt()	returns one token as int, throws exception if not
nextDouble()	returns one token as double, throws exception if not

PrintStream Method	Description
print(str)	prints str
println(str)	prints str and then terminates the line