

CSE 143X: Accelerated Computer Programming I/II

Midterm Exam Cheat Sheet

Primitive Type Declarations

```
int i = 10;
double d = 10.5;
char c = 'A';
boolean b = true;
```

Non-Primitive Type Declarations

```
String s = "cheese";
int[] arr = new int[10];
int[] arr2 = new int[]{1, 2, 3};
```

Loop Examples

```
for (int i = 0; i < list.length; i++) {
    System.out.print(list[i] + " ");
}

while (n < 200) {
    n = n * 2;
}
```

Conditional Examples

```
if (n < 0) {
    System.out.println("negative");
}
else {
    System.out.println("not negative");
}
```

Math Methods

Math.abs(n)	absolute value of n
Math.max(x, y)	maximum of x and y
Math.min(x, y)	minimum of x and y

Random Methods

nextInt(n)	returns a random int between 0 and n - 1 inclusive
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Scanner Methods

nextInt()	reads/returns input as int
nextLine()	reads/returns the next line of input as a String
nextDouble()	reads/returns input as double
next()	reads/returns input as a String

String Methods

charAt(i)	returns the character in this String at index i
length()	returns the number of characters in this String
contains(str)	returns true if this String contains str's characters
startsWith(str)	returns true if this String begins with str's characters
endsWith(str)	returns true if this String ends with str's characters
equals(str)	returns true if this String is the same as str
indexOf(str)	returns the first index in this String where str begins (-1 if not found)
substring(i, j)	returns a new string with the characters from 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