Java

Data Types:

byte / short / int / long	-93, 465
float / double	-93.17, 465.1234
char	'Y', 'u'
boolean	true, false
String	"Hello world!"

Control Flow:

```
if ( expression ) { ... }
else if ( expression ) { ... }
else { ... }
while ( expression ) { ... }
do { ... } while ( expression );        (runs at least once)
for( int i = _; i < _; i ++ ) { ... }
for (var : collection) { ... }           (iterates over collection)
switch ( expression ) {
        case value: ...
                break;
        default: ...
                break;
}
try { ... }
catch (Exception Type e1) { ... } ...
finally { ... }
```

Data Conversions:

```
int i = Integer.parseInt(str);
double d = Double.parseDouble(str);
String s = String.valueOf(val);
int i = (int) numeric expression;
```

java.util.ArrayList Methods:

ArrayList<String> arr = new ArrayList<String>();	
arr.add(var)	- add var to the list
arr.get(i)	- return the ith item
arr.size()	- return number of items in list
arr.remove(i)	- remove the ith item
arr.set(i, val)	- put val at position i

java.util.HashMap Methods:

HashMap<String, String> hm = new HashMap<String, String>();	
hm.put(key, value)	- insert val with key
hm.get(key)	- retrieve val using key
hm.containsKey(key)	- return true if contains key

Arrays

```
dataype[] x = new datatype[size];
```

String Methods:

str.length()	- length of s
str.charAt(i)	- extract character at i
str.substring(start, end)	- substring from start to end
str.toUpperCase()	- returns str in all caps
str.toLowerCase()	- returns str in all lowercase
str.indexOf(x)	- return index of first occurence 'x'
str.replace(old, new)	- replace old with new
str.split(regex)	- split string into tokens
str.trim()	- trim surrounding whitespace
str.equals(str2)	- return bool if str equals str2
str.compareTo(str2)	- return 0 if equal, + or - if not