

# KEY

## Computer Science: Program Your Own RPG

Things we've learned:

Variables:

boolean	\\true, false
char	\\ 'a', 'b', ' _ '
String	\\ "Hello World!"
int	\\ 5, 0, -362
double	\\ 0.0, 1.5, 0.0000001

Arithmetic Operators:

int x = 20; int y = 4;	
+	\\ x + y or "string1" + "string2" (concatenation)
-	\\ x - y
/	\\ x / y
*	\\ x * y
%	\\ x % y (modulo or modulus)
=	\\ x = y
+=	\\ x += y
-=	\\ x -= y
/=	\\ x /= y
*=	\\ x *= y
%=	\\ x %= y

Boolean Operators:

boolean b = true; boolean c = false;	
&&	\\ b && c (and)
	\\ b    c (or)
!	\\ !b (not)

Relational Operators:

double x = 2.5; double y = 2.3;	
==	\\ x == y (equals)
<=	\\ x <= y (less than or equal to)
<	\\ x < y (less than)
>=	\\ x >= y (greater than or equal to)
>	\\ x > y (greater than)

A Class <name>.java:

```
public class <name>{ ....}
```

Main Method:

```
public static void main(String[] args){ ....}
```

Using Arguments:

```
args[0], args[1], ... \\the first argument, the second argument, ...
```

Compiling:

`javac <name>.java`

`java <name> <optional arguments>`

`dir` (see all the files), `cd` (change directory), `G:` (change drives)

Casting and converting types:

`String s = "4"`

`int i = Integer.parseInt(s);`

`double d = Double.parseDouble(s);`

`i = (int)d;`

`d = (double)i/4;`

`s = "" + 5;`

If statements:

`if(<boolean operation>){ ... }`

`else if (<boolean operation>){ ... }`

`else{ ... }`

Block of code: `{...}`

Statement: `....;`

Package: A folder which holds many classes

Importing:

`import java.util.Scanner`      `//Import one thing`

`import java.util.*`      `//Imports everything`

Using the Scanner:

`Scanner input = new Scanner();`

`String s = input.nextLine();`

`Int I = input.parseInt();`

`Double d = input.parseDouble();`

`input.close();`

Checking for errors:

`try{`

`...`

`}catch(Exception e){ ... }`

Comments:

`// One line comment`

`/*`

`*Multiline comment.`

`*\`

-Parenthesis work just as they do in math.