Java Variables

Java types of variables:
int- stores integers (whole numbers), without decimals, such as 123 or -123

float- stores floating point numbers, with decimals, such as 19.99 or -19.99

char- stores single characters, such as 'a' or 'B'. Char values are surrounded by single quotes

boolean- stores values with two states: true or false

Example

```
int intNumber = 10;
System.out.println(intNumber);

float floatNumber = 3.55f;
System.out.println(floatNumber);

char character = 'D';
System.out.println(character);

boolean booleanVal = true;
System.out.println(booleanVal);
```

Java Conditions and If Statements

Java supports the usual logical conditions from mathematics:

- Less than: a < b
- Less than or equal to: a <= b
- Greater than: a > b
- Greater than or equal to: a >= b
- Equal to a == b
- Not Equal to: a != b

You can use these conditions to perform different actions for different decisions.

Java has the following conditional statements:

- Use if to specify a block of code to be executed, if a specified condition is true
- Use else to specify a block of code to be executed, if the same condition is false
- Use else if to specify a new condition to test, if the first condition is false
- Use switch to specify many alternative blocks of code to be executed

Example

```java
int x = 20;
int y = 18;
if (x > y) {
  System.out.println("x is greater than y");
}
```

```java
int time = 20;
if (time < 18) {
  System.out.println("Good day.");
} else {
  System.out.println("Good evening.");
}
// Outputs "Good evening."
```

```java
int time = 22;
if (time < 10) {
  System.out.println("Good morning.");
} else if (time < 20) {
  System.out.println("Good day.");
} else {
  System.out.println("Good evening.");
}
// Outputs "Good evening."
```