Java While Loop

Loops

Loops can execute a block of code as long as a specified condition is reached.

Loops are handy because they save time, reduce errors, and they make code more readable.

Java While Loop

The while loop loops through a block of code as long as a specified condition is true:

Syntax

```java
while (condition) {
  // code block to be executed
}
```

In the example below, the code in the loop will run, over and over again, as long as a variable (i) is less than 5:

```java
int i = 0;
while (i < 5) {
  System.out.println(i);
  i++;
}
```

The Do/While Loop

The do/while loop is a variant of the while loop. This loop will execute the code block once, before checking if the condition is true, then it will repeat the loop as long as the condition is true.

Syntax

```
do {

  // code block to be executed

}
while (condition);
```

The example below uses a do/while loop. The loop will always be executed at least once, even if the condition is false, because the code block is executed before the condition is tested:

Example

```
int i = 0;
do {

  System.out.println(i);

  i++;

}
while (i < 5);
```

Do not forget to increase the variable used in the condition, otherwise the loop will never end.

References

- https://www.w3schools.com/java/java_while_loop.asp
- https://www.programiz.com/java-programming/do-while-loop
- https://www.geeksforgeeks.org/java-while-loop-with-examples/