A loop is a segment of code that is executed repeatedly. A while loop is a piece of code that executes if a Boolean condition is true and continues executing in a loop until the Boolean condition equates false. A do while loop is a piece of code that executes at least once and then continues executing in a loop if the Boolean condition is true until the Boolean condition equates to false. A for loop is a shorter piece of code that summarizes the 3 conditions normally included in a loop code block into a single line; the variable creation, the condition and the incrimination, after which the code that needs to be executed is enclosed in coding brackets. In short, all 3 loops can have the same results in some cases. I see them as follows:

While loop:

These loops are great for complex code in my opinion. I use them with the thought of writing everything out to increase legibility as opposed to for loops where code is condensed and can easily be missed. Below is my example of code in a while loop that will count down from 10 to 0.

public class Main {

public static void main(String[] args) {

int x = 10;

while (x >= 0) {

System.out.println(x);

x--;

}

}

}

Do while loop:

When I need a segment of code executed at least once and them perhaps a few more times or not depending on the conditions, this is where we use this loop as it will always execute at least once. Below is my example of code in a do while loop that will count down from 10 to 0.

public class Main {

public static void main(String[] args) {

int x = 10;

do {

System.out.println(x);

x--;

} while (x >= 0);

}

}

For loop:

When I want to compress my code into as few lines as possible, or optimise it, I use a for loop to condense my loop code. Below is my example of code in a for loop that will count down from 10 to 0.

public class Main {

public static void main(String[] args) {

for (int x = 10; x >= 0; x--) {

System.out.println(x);

}

}

}

Total Words (381)