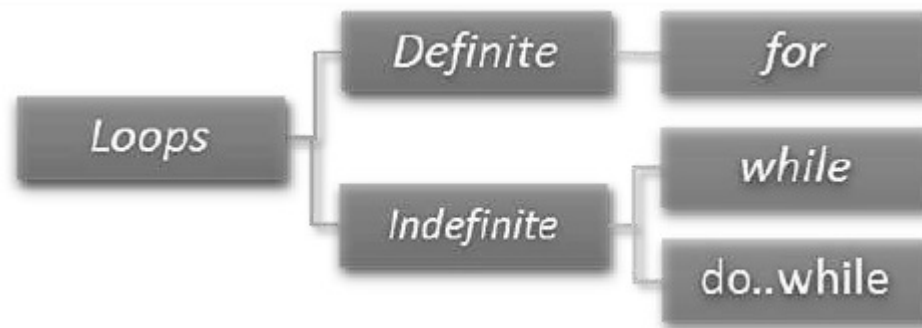


ES6 - Loops

At times, certain instructions require repeated execution. Loops are an ideal way to do the same. A loop represents a set of instructions that must be repeated. In a loop's context, a repetition is termed as an **iteration**.

The following figure illustrates the classification of loops –



Definite Loop

A loop whose number of iterations are definite/fixed is termed as a **definite loop**. The 'for loop' is an implementation of a **definite loop**.

```
for (initial_count_value; termination-condition; step) {  
    //statements  
}
```

Sr.No	Definite Loop & Description
1	The 'for' loop The for loop executes the code block for a specified number of times.
2	The for...in loop The for...in loop is used to loop through an object's properties.
3	The for...of loop The for...of loop is used to iterate iterables instead of object literals.

Indefinite Loop

An indefinite loop is used when the number of iterations in a loop is indeterminate or unknown.

Indefinite loops can be implemented using –

Sr.No	Indefinite Loop & Description
1	The while loop The while loop executes the instructions each time the condition specified evaluates to true.
2	The do...while loop The do...while loop is similar to the while loop except that the do...while loop doesn't evaluate the condition for the first time the loop executes.

The Loop Control Statements

Sr.No	Loop Control Statements & Description
1	The break statement The break statement is used to take the control out of a construct.
2	The continue statement The continue statement skips the subsequent statements in the current iteration and takes the control back to the beginning of the loop.

Using Labels to Control the Flow

A **label** is simply an identifier followed by a colon (:) that is applied to a statement or a block of code. A label can be used with **break** and **continue** to control the flow more precisely.

Line breaks are not allowed between the '**continue**' or '**break**' statement and its label name. Also, there should not be any other statement in between a label name and an associated loop

Sr.No	Label & Description
1	Label with Break A label can be used with break and continue to control the flow more precisely.
2	Label with Continue Line breaks are not allowed between the 'continue' or 'break' statement and its label name.