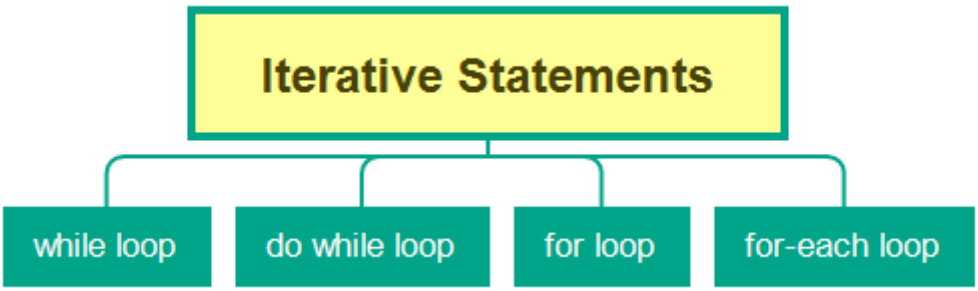
Iterative Statements

Iterative Statements helps us in executing the same block of code multiple times.

- Iterative Statements executes the same set of code until the loop condition is satisfied. (View screen-shot here)
- Different types of Iterative Statements:

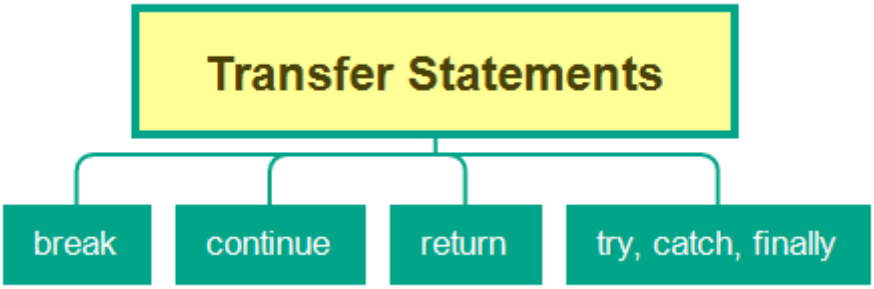


- **while loop**
  - while loop executes the same block of code multiple times i.e. until the boolean condition turns false.
  - while loop tests the condition before executing the code in loop body. (View here)
  - Syntax: View here
  - Demonstrate while loop
    - Demonstrate the while loop when the condition is always true (Demonstrate here)
      - Loop will be iterated infinite times as the condition is always true
    - Demonstrate the while loop when the condition is false (Demonstrate here)
      - Loop wont be executed at-least once as the condition is false.
    - Demonstrate the while loop where the condition is initially true and after few iterations is turned false (Demonstrate here)
      - Loop will be executed until the condition turns false.
- **do while loop**
  - do-while loop works similar to while loop, but the block of code will be executed at-least once even after the condition is false
  - Unlike while loop, do-while loop tests the condition after executing the code in loop body. (View here)
  - Syntax: View here
  - Demonstrate the do-while loop where the condition is initially true and after few iterations has turned false (Demonstrate here)
    - Loop will be iterated multiple times until the condition becomes false
- **for loop**
  - for loop is the most commonly used loop in Java and is used when we know the number of iterations in advance.
  - for loop executes the same block of code multiple times, until the boolean condition turns false.
  - Though while loop and for loop work in the similar manner, while loop is preferred over for loop when we dont know the number of iterations in advance. (View here)
  - Syntax: View here
  - Demonstrate the for loop when the condition is initially true and after few iteration has turned false (Demonstrate here)
    - Loop will be iterated multiple times until the condition becomes false
- **for-each loop**
  - Will be explained later, as it is generally used with Arrays and Collections.

Transfer Statements

Transfer statements are used to transfer the flow of execution from one block of code to a different block of code.

- Different types of Transfer Statements:



- **break;**
  - The purpose of the break; statement is to come out of the statements based on some condition.
  - Demonstrate the usage of break; statements inside any loop statement (Demonstrate here)
- **continue;**
  - The purpose of the continue statement is to skip the current iteration of a loop based on some condition and continue with the next iteration.
  - Demonstrate on how to use continue; statements inside any loop statement (Demonstrate here)
- **return**
  - Will be explained later, as it is used with methods.
- **try, catch, finally**
  - Will be explained later, as it is used in Exception Handling

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