



## J06 Control Flow 2

Control flow  
while and do-while  
for  
break, continue, return

# The `while` and `do-while` statements

- The `while` statement continuously executes a block while a condition is true.
- The `do-while` construct evaluates the condition at the end of the block rather than at the start.

Structured programming: sequence, selection, **iteration**.

# The for statement

- A compact way to *iterate* over a set of values.
- The statement has three logical parts:
  - Initialization
  - Continuation condition
  - Increment statement
- The ‘*enhanced*’ for statement infers the initialization, termination and increment statements, given an array or collection

# Branching statements

- The **break** statement terminates a loop construct
  - *Unlabelled* terminates the inner-most loop
  - *Labelled* terminates the loop named by the label
- The **continue** statement skips the current iteration of a loop
  - *Unlabelled* skips the current iteration of the inner-most loop
  - *Labelled* skips the current iteration of the loop named by the label
- The **return** statement exits the current method