## **REPETITION/ITERATION CONTROL STRUCTURES**

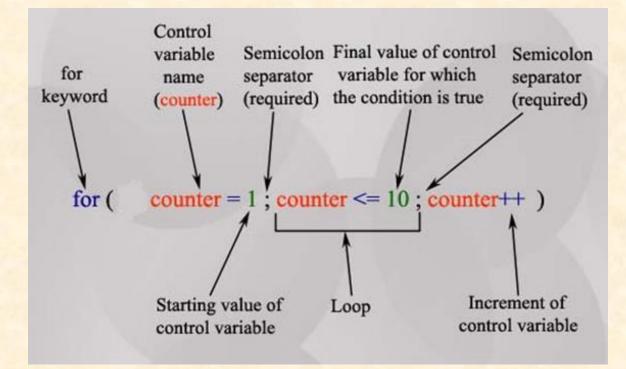
These refer to the execution of a set of instructions which are repeated until some condition is met.

#### For Loop (Bounded loop because it has a fixed number of iterations)

A for loop has three parts. Each part of the loop is separated by a semi-colon.

#### Format:

for (initialization; loop condition; increment)



### While Loop (Unbounded loop because it can use sentinel control)

# NB. A sentinel value/signal value/dummy value or flag value is used to indicate the end of data entry.

### Format:

while (condition)

{ Statement(s) }

NB. The condition is tested first. If the condition is false on the initial test the no statements are executed.

**Do Loop(Unbounded loop because it can use sentinel control)** 

### Format:

do

{ statement(s)}

while (condition);

NB. The condition is tested after the statements. Hence, the statements are executed at least once.

**Dr Gill's Iteration Notes**