Sample Code – Counted Loop

The For Loop

The counted loop is so common that a special type of loop was created to streamline the code.

```
for count: 1 .. 10 put count end for
```

Notes:

1. Do NOT declare the variable count. The for loop will take care of that automatically

Nested Loops

A nested loop is a loop within a loop. Consider the following:

```
for i: 1 ... 3
for j: 1 ... 3
put i * j
end for
end for
```

What is the output?

Nested Loops

```
for i : 1 . . 3
    for j : 1 . .
3
       put i * j
    end for
end for
```

Try a "walkthrough" of the code to determine what it does

| i | j | i*j |
|---|---|-----|
| | | |
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| | | |
| | | |
| | | |

Nested Loops

```
for i : 1 .. 3
  for j : 1 .. 3
   put i * j
  end for
end for
```

| i | j | i * j |
|---|---|-------|
| 1 | 1 | 1 |
| 1 | 2 | 2 |
| 1 | 3 | 3 |
| 2 | 1 | 2 |
| 2 | 2 | 4 |
| 2 | 3 | 6 |
| 3 | 1 | 3 |
| 3 | 3 | 6 |
| 3 | 3 | 9 |

Exercises

See additional exercises and extensions on the course wiki:

http://stevesweeney.pbwiki.com/Exercises+-+Intro+to+Counted+Loops