Loops!

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The real power of programming starts to come out with loops. Using loops we can make the computer do a lot of work with just a few lines of code.

Example 1. *Here is the basic 'for' loop. Play around with it to get the idea.*

```
for i in range(0,5):
    print i
print "The loop is now done."
```

Example 2. *Write a program that finds the sum of the first 10 numbers. Add prints to get a feel for what happens at each step. When you're comfortable find the sum of the first 100 numbers.*

```
total=0
for i in range(1,10+1):
    total = total + i
    # print "The counter is", i
    # print "The total is at:", total
print "The whole total is:", total
```

Example 3. *Make python type the numbers from 1 to 10 but skip your favourite number.*

Example 4. *Write a program that prints random numbers until you get your favourite number.*