For loops

- `While` loops generally iterate over a sequence of choices (`ints` in cases we have seen)
- Python has a specialized mechanism for this case, called a `for` loop

```
for <identifier> in <sequence>:
    <code block>
```

For loops

- Identifier bound to first value in sequence
- Code block executed
- Identifier bound to next value
- Code block executed
- Continues until sequence exhausted or a **break** statement is executed
- To generate a sequence of integers, use
  - `range(n) = [0, 1, 2, 3, …, n-1]`
  - `range(m,n) = [m, m+1, …, n-1]`

A cleaned up cube root finder

```
x = int(raw_input('Enter an integer: '))
for ans in range(0, abs(x)+1):
    if ans**3 == abs(x):
        break
if ans**3 != abs(x):
    print(str(x) + ' is not a perfect
  cube')
else:
    if x < 0:
        ans = - ans
    print('Cube root of ' + str(x) + ' is
  ' + str(ans))
```