

How do I Teach a Computer to Accumulate?

The Accumulating Pattern in Python

CSE



unit 2

Accumulating in Python

Def: **Accumulating** is two things:

1. Changing by a variable amount
2. Remembering where you are

Accumulating involves:

1. Addition
2. A variable

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e.g.

```
c = 0      #start the total
```

```
c = c+5    #increment the total
```

```
c = c+8    #increment the total
```

```
print(c)   #show the total
```

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Def: The Accumulating Pattern
is a Python instruction that looks
like this:

$$c = c + n$$

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Fact: The Accumulating Pattern
is a lot like counting only by a
different number each time!

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e.g.

```
1: c = 0
2: c = c + 2
3: c = c + 3
4: c = c + 8
5: c = c + 1
6: print (c)
```

e.g.

```
1: c = 0
2: for _ in range (4):
3:     n = input ("? ")
4:     n = int (n)
5:     c = c + n
6: print (c)
```