

Reduce

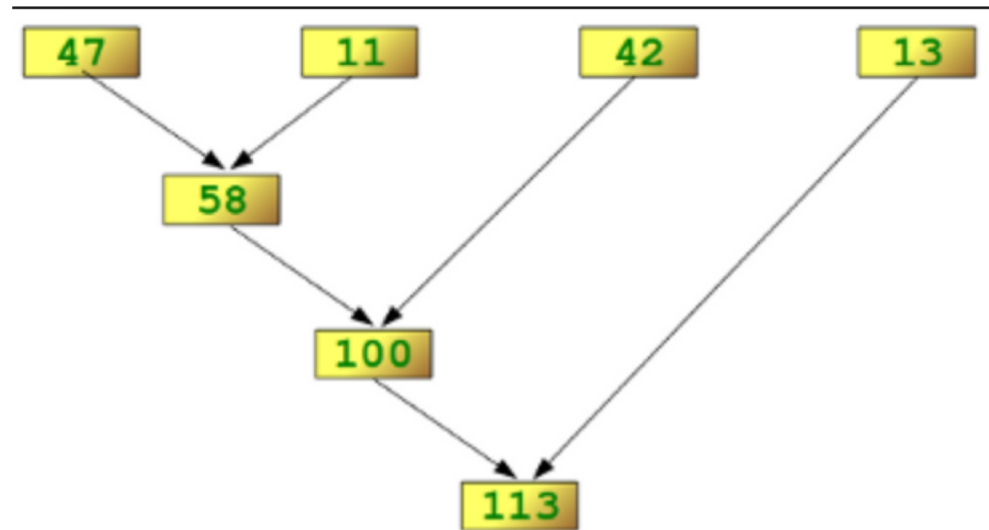
# Reduce

Form:

`reduce(function(x,y), list)`

where  $f(x, y)$  is a function of two arguments and returns a value

- `reduce(lambda x,y: x+y, [47,11,42,13])`



# Example

```
import functools

values = range(-5, 6)
print(list(values))

reduced = functools.reduce((lambda x, y: x + y), values)
print(type(reduced))
print(reduced)
```

```
[-5, -4, -3, -2, -1, 0, 1, 2, 3, 4, 5]
<class 'int'>
0
```

# Another Example

```
words = ["The", "quick", "brown", "fox"]  
sentence = functools.reduce((lambda x, y : x + " " + y), words)  
print(sentence)
```

The quick brown fox