Canonical Solutions: Python Exercises Part 1

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```
import sys

#1
print(int(sys.argv[1]) + int(sys.argv[2]))

#2
print(sum([int(x) for x in sys.argv[1:]]))

#3
print([int(x) for x in sys.argv[1:] if int(x) % 3 == 0])

#4
def fibonacci(x):
    return 1 if x in (0,1) else fibonacci(x - 1) + fibonacci(x - 2)
print([fibonacci(x) for x in range(int(sys.argv[1]))])

#5
print([x**2 - 3*x + 2 for x in range(int(sys.argv[1]), int(sys.argv[2])+1)])

#6
a, b, c = [float(x) for x in sys.argv[1:4]]
if a + b < c or a + c < b or b + c < a:
    print("Error - bad side lengths")
else:
    p = (a + b + c) / 2
    print((p*(p-a)*(p-b)*(p-c))**0.5)

#7
print({x: sys.argv[1].lower().count(x) for x in "aeiou"})

#8
previous = "N/A"
while previous != "quit":
    current = input("Please type your name: ")
    print("The last name was %s." % previous)
    previous = current

#9
previous = []
while "quit" not in previous:
    current = input("Please type your name: ")
    print("Previous names: %s" % str(previous)[1:-1])
    previous.append(current)

#10
q = '"Don' + "'t quote me," + '" she said.'
r = '"Don\'t quote me," she said.'
s = '''"Don't quote me," she said.'''
print(q + "\n" + r + "\n" + s)
```