1. [5 points] What does each of the following expression evaluate to? Assume that isPrime is a boolean function that takes one argument and returns True if that argument is a prime number; otherwise the function returns False. Assume that concat is a function that takes two arguments a and b and returns a + b.

(a) map(str, range(0, 10, 3)) Ans. ['0', '3', '6', '9']

(b) len(filter(isPrime, range(20))) Ans. 8

(c) reduce(concat, map(str, range(1, 10, 2))) Ans. '13579'

(d) reduce(concat, range(1, 10, 2)) Ans. 25

(e) map(range, range(5)) Ans. [ [ ], [0], [0,1], [0,1,2], [0,1,2,3] ]

Turn over for Problem 2.
2. [5 points] Here is a partially completed function called $\text{maxPairSum}$ that takes a list of
numbers as a parameter and returns the pair of numbers in consecutive positions that add
up to the largest value. For example, if the given list is $[3, -1, 4, 2, 5, -1, 11, -8]$ then the function would return the list $[-1, 11]$. In the following function, the condition
of the if-statement is missing and one line in the body of the if-statement is missing. Your
task is to supply these missing code fragments.

```python
import sys
def maxPairSum(L):
    maxSum = -1*sys.maxint
    maxIndex = -1

    for i in range(len(L)-1):
        if (L[i] + L[i+1]) > maxSum:
            maxSum = L[i] + L[i+1]
            maxIndex = i

    return L[maxIndex:maxIndex+2]
```

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