

Question 1: NumPy Matrix Fun:

```
1 def findMagicDiagonal(matrix):
2     matrix = numpy.array(matrix)
3     n = len(matrix)
4
5     mainDiagonalSum = numpy.trace(matrix)
6     antiDiagonalSum = numpy.trace(numpy.fliplr(matrix))
7
8     if mainDiagonalSum >= antiDiagonalSum:
9         diagonal = numpy.diagonal(matrix)
10        diagonalIndices = numpy.vstack((numpy.arange(n), numpy.arange(n))).T
11    else:
12        diagonal = numpy.diagonal(numpy.fliplr(matrix))
13        diagonalIndices = numpy.vstack((numpy.arange(n), numpy.arange(n)[::-1])).T
14
15    return numpy.sum(diagonal), diagonalIndices.tolist()
```

Question 2: Word Frequency Rumble:

```
1 def WordFrequencyRumble(filename):
2     wordCount = {}
3
4     with open(filename, 'r') as file:
5         for line in file:
6             line = line.strip().translate(str.maketrans('', '', string.punctuation))
7             words = line.split()
8
9             for word in words:
10                if word in wordCount:
11                    wordCount[word] += 1
12                else:
13                    wordCount[word] = 1
14
15    topWords = sorted(wordCount.items(),
16                      key=lambda x: x[1], reverse=True)[:3]
17    return topWords
```