1. Using the KNN example from class, write a function that finds the optimal value for k. You should iterate over a range of values and return the k and the score when the accuracy score is maximized.

2. Create a function called digital_root that takes in an integer. Digital root is the recursive sum of all the digits in a number.

   Given n, take the sum of the digits of n. If that value has more than one digit, continue reducing in this way until a single-digit number is produced. The input will be a non-negative integer.

   Examples:

```
16  -->  1 + 6 = 7
942  -->  9 + 4 + 2 = 15  -->  1 + 5 = 6
132189  -->  1 + 3 + 2 + 1 + 8 + 9 = 24  -->  2 + 4 = 6
493193  -->  4 + 9 + 3 + 1 + 9 + 3 = 29  -->  2 + 9 = 11
```