**Taking it further**

Another 'classic' way to make code more efficient is to remove redundant *if*statements.

***Example:*** *Challenge:*Create a program which simulates the rolling of a six-sided dice. The program must return the result of each dice roll as a word (not a number, for example, if the algorithm returns a 6 then the result displayed must be 'SIX' etc.

**Possible solutions:**

*Solution 1:*

|  |  |
| --- | --- |
|  | ​# Dice-roll simulator version 1import random#Pick a number between 1 and 6number = random.randint(1,6)if number == 1:    print("ONE")elif number == 2:    print("TWO")elif number == 3:    print("THREE")elif number == 4:    print("FOUR")elif number == 5:    print("FIVE")else:    print("SIX") |

Number of lines of code (not counting comments or blank lines) = **14**

***Solution 2:***

|  |  |
| --- | --- |
|  | # Dice-roll simulator version 2import random# List containing each of the 6 sides of a dice.dice=["ONE", "TWO", "THREE", "FOUR", "FIVE", "SIX"]# Pick a number from the list at random.print(random.choice(dice)) |

Number of lines of code (not counting comments or blank lines) = **3**