QUIZ 3

COMP9021 PRINCIPLES OF PROGRAMMING

```
$  python3
...
>>> from quiz_3 import *
>>> values = give_values_to_letters(0)
>>> values
[7, 7, 1, 5, 9, 8, 7, 5, 8, 6, 4, 9, 3, 5, 3, 2, 5, 9, 3, 5, 2, 2, 6, 8, 9, 2]
>>> print(f'A is worth {values[0]}, '
...       f'B is worth {values[1]}, '
...       f'C is worth {values[2]}, ..., '
...       f'Y is worth {values[-2]}, '
...       f'Z is worth {values[-1]}'
...      )
A is worth 7, B is worth 7, C is worth 1, ..., Y is worth 9, Z is worth 2
>>> can_be_built_from_with_value('FIFHT', 'ABZUFTTHI', values)
-1
>>> can_be_built_from_with_value('FIFTH', 'ABZUFTTHI', values)
0
>>> # F = I = 8, T = H = 5,         8 + 8 + 8 + 5 + 5 = 34
>>> can_be_built_from_with_value('FIFTH', 'ABFZUFTTHI', values)
34
>>> can_be_built_from_with_value('ZOOME', 'ABZYABZOYABZY', values)
-1
>>> can_be_built_from_with_value('ZOOM', 'ABZYABZOYABZY', values)
0
>>> can_be_built_from_with_value('ZOOM', 'OABZYABZMOMYABZYO', values)
11
>>> most_valuable_solutions('UUU', values)
[]
>>> most_valuable_solutions('ABFZUFTTHI', values)
['FIFTH']
>>> most_valuable_solutions('OABZYABZMOMYABZYO', values)
['BOMBAY']
>>> most_valuable_solutions('ABCDEFGHIJKLMNOPQRSTUVWXYZ', values)
['AMBIDEXTROUSLY']
>>> most_valuable_solutions('AAAEEEIIIOOOUUUBMNOPR', values)
['POMERANIA', 'IBERIAN']
>>> most_valuable_solutions('THISORTHAT', values)
['THROATS', 'ARTIST', 'STRAIT', 'TRAITS']
```

Date: Trimester 1, 2020.

```
>>> values = give_values_to_letters(1)
>>> values
[3, 2, 5, 2, 8, 8, 8, 7, 4, 2, 8, 1, 7, 7, 1, 8, 5, 4, 2, 6, 1, 1, 1, 9, 1, 7]
>>> can_be_built_from_with_value('WRISTWATCHES', 'HTWSRWSITACE', values)
49
>>> most_valuable_solutions('HTWSRWSITACE', values)
['WRISTWATCHES']
>>> most_valuable_solutions('THISORTHAT', values)
['THROATS', 'THIRST', 'THRASH']
>>> most_valuable_solutions('LEURA', values)
['EARL', 'LEAR', 'REAL']
>>> most_valuable_solutions('OBAMA', values)
['MAO']
>>> most_valuable_solutions('QWERTYUIO', values)
['EQUITY', 'TORQUE']
```