

# Python assignment 3

## 2D-Array (Nested list)

**2D array** is two-dimensional array. In python it is represented as nested list. Such data type is useful for representing rectangular values. E.g. values of a chess board or a Sudoku puzzle.

You tasks for this assignment:

Create a 2D-array where the first row contains the first 21 **Non-perfect** numbers; the second row contains the first 21 Fibonacci numbers; and the last row contains the product of the numbers from the same column.

*Hint:* You can use **zip** function to combine 2 iterables (objects) in a *for-loop*. E.g.:

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```
1  l1 = [1, 2, 0]
2  l2 = [4, 0, 0]
3  for n1, n2 in zip(l1, l2):
4      print(n1 + n2)
```

---

This will output:

5

2

0

Example output of the assignment:

[[1, 2, 3, 4, 5, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22],

[0, 1, 1, 2, 3, 5, 8, 13, 21, 34, 55, 89, 144, 233, 377, 610, 987, 1597, 2584, 4181, 6765],

[0, 2, 3, 8, 15, 35, 64, 117, 210, 374, 660, 1157, 2016, 3495, 6032, 10370, 17766, 30343, 51680, 87801, 148830]]