## Quiz 11. Dynamic programming

Solve the following puzzle:
The objective is to go from point A1 to point D4 in the table below, moving through the cells of the table: only East, South and South-East directions are allowed.
While passing through a cell of the table, you collect (positive values) or pay (negative values) the specified number of gold coins.

Find a path that will end up with the maximum number of coins collected.
In your answer, specify the number of collected coins and the path you used to collect them.


|  | 1 | 2 | 3 | 4 |
| :--- | ---: | ---: | ---: | ---: |
| A | 1 | --1 | 6 | 5 |
| B | 1 | 3 | 1 | --1 |
| C | --3 | 5 | 1 | 4 |
| D | 1 | --1 | 4 | 5 |

