

10.9.2023 18:14:56

recursive\_sum.py

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1
2 # HSLU / ICS/AIML : Modul ADS : Algorithmen & Datenstrukturen
3 # Path   : uebung01/ml/aufgabe03
4 # Version: Sun Sep 10 18:14:56 CEST 2023
5
6 def recursive_sum(n):
7     if n == 0:
8         return 0
9     else:
10        return n + recursive_sum(n - 1)
11
12
13 if __name__ == '__main__':
14
15     n = 100
16     print("Sum of 0..100 recursively          = ", recursive_sum(n))
17     print("Sum of 0..100 explicitly : n * (n + 1) / 2) = ", (n * (n + 1) // 2))
18
19
20 """ Session-Log:
21
22 Sum of 0..100 recursively          = 5050
23 Sum of 0..100 explicitly : n * (n + 1) / 2) = 5050
24
25 """
```