Sum Until Unit

Given an integer n, sum its digits until the result is a single digit.

Input Format

an integer n

Output Format

return a single digit integer. i.e. $0 \le \text{answer} \le 9$

Constraints

• $0 \le n \le 10^{12}$

Sample Input

```
n=1234560091077
```

Sample Output

9

Explanation

- \bullet 1+2+3+4+5+6+0+0+9+1+0+7+7=45
- 4+5=9 (because the result is a single digit)

Implementation

Goal: Fill in the following function:

```
def sum_until_unit(n: int) -> int:
    ...
    return ...
if __name__ == "__main__":
    # You can test anything inside this block and can send it to grader
    # The grader will use only the function that you have implemented
    # !!! DO NOT write anything outside this block
    print(sum_until_unit(1234560091077))
```

Hint

• [int(a) for a in str(n)]