

1157 - u Calculate e

Description

$$\sum_{i=0}^k 1/i!$$

A simple mathematical formula for **e** is: $\sum_{i=0}^k 1/i!$ where **k** is allowed to go to infinity. This can actually yield very accurate approximations of **e** using relatively small values of **k**.

Input specification

No input.

Output specification

Output the approximations of **e** generated by the above formula for the values of **n** from **0** to **9**. Your output should appear similar to that shown below.

Sample input

No input.

Sample output

```
n e
- - - - -
0 1
1 2
2 2.5
3 2.666666667
4 2.708333333
...
...
```