Evaluating e^x

The series expansion of e^x is given by:

$$1 + x + x^2/2! + x^3/3! + x^4/4! + \ldots\ldots$$

Evaluate e^x for given values of x by using the above expansion *for the first 10 terms*.

Input Format

The first line contains an integer N, the number of test cases.
N lines follow. Each line contains a value of x for which you need to output the value of e^x using the above series expansion. These input values have exactly 4 decimal places each.

Output Format

Output N lines, each containing the value of e^x, computed by your program.

Constraints

$1 <= N <= 50$
$-20.00 <= x <= 20.00$
Var, *Val* in Scala and *def* and *defn* in Clojure are blocked keywords. The challenge is to accomplish this without either mutable state or direct declaration of local variables.

Sample Input

```
4
20.0000
5.0000
0.5000
-0.5000
```

Sample Output

```
2423600.1887
143.6895
1.6487
0.6065
```

Explanation

The output has the computed values of e^x corresponding to each test case. They are correct up to 4 decimal places and on separate lines.

Scoring

All test cases carry an equal weight in the final score. For your solution to pass a given test case, all the values of e^x computed by you must be within $+/-0.1$ of the expected answers. This tolerance level has been kept to account for slightly different answers across different languages.