

DISUBSTR - Distinct Substrings

Given a string, we need to find the total number of its distinct substrings.

Input

T- number of test cases. $T \leq 20$;

Each test case consists of one string, whose length is ≤ 1000

Output

For each test case output one number saying the number of distinct substrings.

Example

Sample Input:

```
2
CCCCC
ABABA
```

Sample Output:

```
5
9
```

Explanation for the testcase with string ABABA:

len=1 : A,B

len=2 : AB,BA

len=3 : ABA,BAB

len=4 : ABAB,BABA

len=5 : ABABA

Thus, total number of distinct substrings is 9.