SIMPLE CHECKSUM PROBLEM

A checksum is a type of simple error detection scheme, meant to catch incorrectly entered data such as typos. Credit cards, for example, use the **Luhn algorithm** to generate account numbers. Alternatively, a checksum could be a digit appended to the end of a number that needs to be later validated.

A super-simple scheme used to validate **6-digit** student numbers is as follows:

- Break the number up into 6 digits.
- Add up all the digits together to get a new number.
- Repeat the process until the result is only a single digit.
- Match the resulting digit to the capital letter of alphabet, in that position.

Example

```
123456
1+2+3+4+5+6 = 21
2+1 = 3
3 = C
```

The input file **numbers.txt** will contain 5 lines, each being a 6-digit positive integer followed by a space and a capital letter. Numbers will not have leading zeros, and thus digits will never add up to 0.

The output will contain 5 lines, stating **match** or **error**, depending if the number generates the same checksum letter as supplied or not.

Sample Input:
```
123456 C
123456 A
100000 A
111111 F
111114 I
```
Sample Output:
```
match
error
match
match
match
```