CMPUT 274/5 - Tangible Computing **Fall 2019**
Morning Problem: Check Digits

Description

Barcodes are very useful, but scanning them can create unexpected problems. A particular problem is determining whether the code was scanned and deciphered correctly - how can we do this?

One solution relies on adding an extra digit to the end of the barcode that depends somehow on the other digits in the code (called a 'check digit'). By verifying this dependence, we can determine if any of the digits were read incorrectly.

The system we will use is a variation of the ISBN-10 system (used for book barcodes), which we will call ISBN-4: Let the digits of the barcode be d_1, d_2, d_3, d_4. We say d_1 is in position 1, d_2 in position 2, etc.

- Multiply each digit by its position number, and sum these values together.
- If the result is divisible by 5, declare the barcode was read correctly.
- Otherwise, report an error.

Your challenge is to write a program to verify whether a given ISBN-4 barcode was scanned correctly by running this verification procedure.

Input

The input will be 4 space-separated digits d_1, d_2, d_3, d_4. You are guaranteed these are digits, i.e. integers between 0 and 9.

Output

Your program should output `yes` (followed by a newline) if the barcode is correct according to the above rules, or `no` (followed by a newline) otherwise.

Sample Input 1

```
1 2 3 4
```

Sample Output 1

```
yes
```

Explanation: $1 \cdot 1 + 2 \cdot 2 + 3 \cdot 3 + 4 \cdot 4 = 30$, which is divisible by 5.

Sample Input 2

```
1 2 3 5
```

Sample Output 2

```
no
```

Explanation: $1 \cdot 1 + 2 \cdot 2 + 3 \cdot 3 + 5 \cdot 4 = 34$, which is **not** divisible by 5.

Sample Input 3

```
5 9 4 0
```

Sample Output 3

```
yes
```

Explanation: $5 \cdot 1 + 9 \cdot 2 + 4 \cdot 3 + 0 \cdot 4 = 35$, which is divisible by 5.

Sample Input 4

```
4 9 4 0
```

Sample Output 4

```
no
```

Explanation: $4 \cdot 1 + 9 \cdot 2 + 4 \cdot 3 + 0 \cdot 4 = 34$, which is **not** divisible by 5.