Lab: While Loops

1. Sum Digits

Write a function to sum the digits of given number

- Receives an **input** number
- **Sum** its digits and print the sum

Examples

Input	Explanation	Output
5634	5 + 6 + 3 + 4	18
150	1 + 5 + 0	6
-532	-5 + 3 + 2	0

2. Favorite Book

Write a function to guess for a favorite book, which:

- Receives a **favorite book's name**
- Receives **book names** until it reaches the favorite book
- Prints "**Book found!**" and stops afterwards
- Prints "**Invalid book:** " + book for all invalid books

Example

Input	Output
Alice in Wonderland	
Winnie the Pooh Alice in Wonderland	Invalid book: Winnie the Pooh Book Found!

3. Find Min and Max

Write a function to **find the min and max numbers**

- Reads **numbers** until "**END**" is reached
- Prints the **biggest** and the **smallest** number

Example

Input	Output
10 20 304 0 50 END	Min number: 0 Max number: 304

4. Special Number

Write a function to check if given number is **special**:

- Special numbers are divisible by all of their digits without remainder
- Receives a **number** and check whether it is a special number
- Print "**{num} is special**" if the number is special
- Otherwise, print "**{num} is not special**"

Example

Input	Output
23	23 is not special
204	204 is special

5. Special Bonus

Write a function to apply a **20% bonus f**or certain number:

- Receives a number from the input: the "**stop number**"
- Receives numbers from the input until it finds the stop number
- When the stop number is found, increase the value of the **previous number** before it with **20%** and print it

Example

Input	Explanation	Output
25 20 30 25	30 * 120% = 36	36

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6. Account Balance

Write a function to calculate an **account balance**

- Receives a sequence of i**ncomes / expenses**, until "**End**" is read
- Adds the money to the balance (starting from 0) and print "**Increase: {money}** " or "**Decrease: {money}**"
- Finally, prints the **account balance** (like shown below)

Example

Input	Output
500 15.5 -80.35 End	Increase: 500.00 Increase: 15.50 Decrease: 80.35 Balance: 435.15

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