

# 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	Output
5634, 5 + 6 + 3 + 4	18
150, 1 + 5 + 0	6
-532, 5 + 3 + 2	10

## 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 for 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	Output
25 20 30 25	36

## 6. Account Balance

Write a function to calculate an account balance

- Receives a sequence of incomes / 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	Increase: 500.00
15.5	Increase: 15.50
-80.35	Decrease: 80.35
End	Balance: 435.15