

# Exercises: Data Types and Variables

## 1. Integer Operations

Read four integer numbers. Add first to the second, divide (integer) the sum by the third number and multiply the result by the fourth number. Print the result.

### Examples

Input	Output	Input	Output
10 20 3 3	30	15 14 2 3	42

## 2. Chars to String

Write a function that receives **3 characters**. Combine all the characters into one string and print it on the console.

### Examples

Input	Output
a b c	abc
% 2 o	%2o
1 5 p	15p

## 3. Elevator

Calculate how many courses will be needed to **elevate n persons** by using an elevator of **capacity of p persons**. The input holds two lines: the **number of people n** and the **capacity p** of the elevator.

### Examples

Input	Output	Comments
17 3	6	5 courses * 3 people + 1 course * 2 persons
4 5	1	All the persons fit inside in the elevator. Only one course is needed.
10 5	2	2 courses * 5 people

## Hints

- You should **divide n by p**. This gives you the number of full courses (e.g.  $17 / 3 = 5$ ).
- If **n** does not divide **p** without a remainder, you will need one additional partially full course (e.g.  $17 \% 3 = 2$ ).
- Another approach is to round up  $n / p$  to the nearest integer (ceiling), e.g.  $17/3 = 5.67 \rightarrow$  rounds up to 6.
- For the round-up calculation you might use `math.ceil()` function. Before you can use it, you need to import `math` library:

```
import math
```

## 4. Sum of Chars

Write a program, which sums the ASCII codes of **n** characters and prints the **sum** on the console.

### Input

- On the **first line**, you will receive **n** – the number of **lines**, which will **follow**
- On the next **n lines** – you will receive letters from the **Latin** alphabet

### Output

Print the **total sum** in the following format:

The sum equals: {total\_sum}

### Constraints

- **n** will be in the interval **[1...20]**.
- The **characters** will always be either **upper** or **lower**-case letters from the **English alphabet**
- You will always receive **one letter per line**

### Examples

Input	Output	Input	Output
5 A b C d E	The sum equals: 399	12 S o f t U n i R u l z z	The sum equals: 1263

## 5. Print Part of the ASCII Table

Find online more information about [ASCII](#) (American Standard Code for Information Interchange) and write a program that **prints part of the ASCII table** of characters on the console. On the first line of input you will receive **the char index you should start with** and on the **second line** - **the index of the last character** you should print.

Examples

Input	Output
60 65	< = > ? @ A
69 79	E F G H I J K L M N O
97 104	a b c d e f g h
40 55	( ) * + , - . / 0 1 2 3 4 5 6 7