Exercises: Methods

Problems for exercises and homework for the "Programming Fundamentals" course @ SoftUni.

You can check your solutions in Judge.

1. Smallest of Three Numbers

Write a method to print the smallest of three integer numbers. Use an appropriate name for the method.

Examples

Input	Output
2 5 3	2
600 342 123	123
25 -21 4	-21

2. Vowels Count

Write a method that receives a single string and prints the count of the vowels. Use an appropriate name for the method.

Examples

Input	Output
SoftUni	3
Cats	1
JS	0

3. Characters in Range

Write a method that receives two characters and prints all the characters in between them on a single line according to ASCII.

Examples

Input	Output
a d	bс
#	\$ % & ' () * + , / 0 1 2 3 4 5 6 7 8 9
C #	\$ % & ' () * + , / 0 1 2 3 4 5 6 7 8 9 : ; < = > ? @ A B







4. Password Validator

Write a program that checks if a given password is valid. Password rules are:

- 6 10 characters (inclusive);
- Consists only of letters and digits;
- Have at least 2 digits.

If a password is valid, print "Password is valid". If it is not valid, for every unfulfilled rule, print a message:

- "Password must be between 6 and 10 characters"
- "Password must consist only of letters and digits"
- "Password must have at least 2 digits"

Examples

Input	Output
logIn	Password must be between 6 and 10 characters Password must have at least 2 digits
MyPass123	Password is valid
Pa\$s\$s	Password must consist only of letters and digits Password must have at least 2 digits

Hints

Write a method for each rule.

5. Add and Subtract

You will receive 3 integers. Write a method sum to get the sum of the first two integers and subtract the method that subtracts the third integer from the result from the sum method.

Examples

Input	Output
23 6 10	19
1 17 30	-12
42 58 100	0

6. Middle Characters

You will receive a single string. Write a method that prints the middle character. If the length of the string is even, there are two middle characters.













Examples

Input	Output
aString	r
someText	еТ
3245	24

7. NxN Matrix

Write a method that receives a single integer **n** and prints an **nxn** matrix with that number.

Examples

Input	Output
3	3 3 3 3 3 3 3 3 3
7	7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7
2	2 2 2 2

8. Factorial Division

Read two integer numbers. Calculate the <u>factorial</u> of each number. Divide the first result by the second and print the division formatted to the second decimal point.

Examples

Input	Output
5	60.00
2	

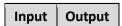
Input	Output
6 2	360.00

9. Palindrome Integers

A palindrome is a number that reads the same backward as forward, such as 323 or 1001. Write a program that reads a positive integer number until you receive "END". For each numbered print, whether the number is palindrome or not.

Examples



















		_		
123	false		32	false
323	true		2	true
421	false		232	true
121	true		1010	false
END			END	

Top Number 10.

Read an integer n from the console. Find all top numbers in the range [1 ... n] and print them. A top number holds the following properties:

- Its sum of digits is divisible by 8, e.g. 8, 16, 88.
- Holds at least one odd digit, e.g. 232, 707, 87578.

Examples

Input	Output
50	17 35
	33

Input	Output
100	17
	35
	53
	71
	79
	97















