# Lab: JS Basic Syntax, Conditional Statements and Loops

Problems for exercise and homework for the "JS Fundamentals" Course @ SoftUni. Submit your solutions in the SoftUni judge system at: <a href="https://judge.softuni.bg/Contests/1189">https://judge.softuni.bg/Contests/1189</a>

# 1. Multiply Number by 2

Write a function that receives a number and prints as result that number multiplied by two

## **Examples**

Input	Output	
2	4	
5	10	
20	40	

#### Hints

Create a function called **solve** (or some other name). As parameters it will receive a number **num**.

```
function solve(num) {
```

Print the result inside the function

```
function solve(num)
    console.log(num *
```

If you want to test your code locally, you need to call the function

```
function solve(num)
    console.log(num * 2)
solve(5)
```

## 2. Excellent Grade

Write a function that receives a single number and checks if the grade is excellent or not. If it is, print "Excellent", otherwise print "Not excellent"

# **Examples**

Input Output
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5.50	Excellent
4.35	Not excellent

### **Hints**

Check if the number given is greater or equal to 5.50 and print the corresponding result

```
function solve(grade) {
    if (grade >= 5.50) {
        console.log("Excellent")
    } else {
        //TODO
```

## 3. Numbers from 1 to 5

Create a function that prints all the numbers from 1 to 5 (inclusive) each on a separate line

### Hints

Create a for loop starting from 1 and continuing until 5 and print the number

```
function solve() {
    for (let i = 1; i <= 5; i++) {
        //TODO
    }
solve()
```

## 4. Numbers from N to 1

Create a function that receives a number N and prints all the numbers from N to 1. Try using while loop

# **Examples**

Input	Output
5	5 4 3 2 1
3	3 2 1

#### Hints

Create a while loop with condition  $N \ge 1$ . Print N and decrease it with each step











```
function solve(n) {
    while (n >= 1) {
        console.log(n)
solve(5)
```

## 5. Numbers from M to N

Write a function that receives a number M and a number N (M will always be bigger than N). Print all numbers from M to N

# **Examples**

Input	Output
	6
	5 4
6, 2	4
	3
	3 2
4, 1	4
	3 2
	2
	1

#### Hints

Use for or while loop and print the numbers.

```
function solve(m, n) {
    for (let i = m; i >= n; i--) {
        console.log(i)
solve(5,3)
```

# 6. Student Information

You will be given 3 parameters – student name (string), age (number) and average grade (number). Your task is to print all the info about the student in the following format. The grade should be formatted to the second decimal point:

"Name: {student name}, Age: {student age}, Grade: {student grade}".

# **Examples**

Input Output
--------------













'John', 15, 5.54678	Name: John, Age: 15, Grade: 5.55
'Steve', 16, 2.1426	Name: Steve, Age: 16, Grade: 2.14
'Marry', 12, 6.00	Name: Marry, Age: 12, Grade: 6.00

#### Hint

Use **toFixed()** method to format the grade.

1. First receive the input:

```
function solve(name, age, grade)
```

2. Print the output:

```
console.log(`Name: ${name}, Age: ${age}, Grade: ${grade.toFixed(2)}`)
```

### 7. Month Printer

Write a program, which takes an integer from the console and prints the corresponding month. If the number is more than 12 or less than 1 print "Error!"

### Input

You will receive a single number.

# Output

If the number is within the boundaries print the corresponding month, otherwise print "Error!"

# **Examples**

Input	Output
2	February

Input	Output
13	Error!

# 8. Foreign Languages

Write a program, which prints the language, that a given country speaks. You can receive only the following combinations: English is spoken in England and USA; Spanish is spoken in Spain, Argentina and Mexico; for the others, we should print "unknown".

## Input

You will receive a single country name.

# **Output**

Print the language, which the country speaks, or if it is unknown for your program, print "unknown".













## **Examples**

Input	Output
USA	English

Input	Output
Germany	unknown

#### Hint

Think how you can merge multiple cases, in order to avoid writing more code than you need to.

### 9. Theatre Promotions

A theatre is doing a ticket sale, but they need a program to calculate the price of a single ticket. If the given age does not fit one of the categories, you should print "Error!". You can see the prices in the table below:

Day / Age	0 <= age <= 18	18 < age <= 64	64 < age <= 122
Weekday	12\$	18\$	12\$
Weekend	15\$	20\$	15\$
Holiday	5\$	12\$	10\$

### Input

The input comes in two parameters. The first one will be the type of day (string). The second – the age of the person (number).

## **Output**

Print the price of the ticket according to the table, or "Error!" if the age is not in the table.

#### **Constraints**

- The age will be in the interval [-1000...1000].
- The type of day will always be valid.

## **Examples**

Input	Output
'Weekday', 42	18\$

Input	Output
'Holiday', -12	Error!

Output
5\$

#### 10. Divisible by 3

Write a program, which prints all the numbers from 1 to 100, which are divisible by 3. You have to use a single for loop. The program should not receive input.

## 11. Sum of Odd Numbers

Write a program that prints the next **n odd numbers** (starting from 1) and on the **last row** prints the **sum of them**.

# Input

You will receive a number – **n**. This number shows how many **odd numbers** you should print.

















# **Output**

Print the next **n** odd numbers, starting from **1**, separated by **new lines**. On the last line, print the **sum** of these numbers.

## **Constraints**

• n will be in the interval [1...100]

# **Examples**

Input	Output
5	1
	3
	3 5
	7
	9
	Sum: 25

Input	Output
w	1 3 5 Sum: 9















