

# Lab: JS Basic Syntax, Conditional Statements, and Loops

Problems for exercise and homework for the ["JS Fundamentals" Course @ SoftUni](https://softuni.org/Courses/JS-Fundamentals).

Submit your solutions in the SoftUni judge system at: <https://judge.softuni.org/Contests/1189>

## 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 * 2);  
}
```

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

```
function solve (num) {  
    console.log(num * 2);  
}  
solve(2);
```

## 2. 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:

**`Name: {student name}, Age: {student age}, Grade: {student grade}`**

**Note:** The grade should be formatted to the **second decimal point**.

## 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)}`)
```

## 3. 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
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  
    }  
}
```

## 4. 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	Input	Output
USA	English	Germany	unknown

### Hint

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

## 5. Month Printer

Write a program, that takes an **integer** as a parameter 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	Input	Output
2	February	13	Error!

## 6. 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	Input	Output	Input	Output
'Weekday', 42	18\$	'Holiday', -12	Error!	'Holiday', 15	5\$

## 7. Numbers from 1 to 5

Write 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();
```

## 8. 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.

## 9. Numbers from N to 1

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

### Examples

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

### Hints

Create a while loop with condition **N >= 1**. Print **N** and decrease it with each step.

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

## 10. 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, 2	6 5 4 3 2
4, 1	4 3 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(6,2);
```

## 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 **newlines**.

On the last line, print the **sum** of these numbers in the following format: ``Sum: {total sum}``

### Constraints

- n** will be in the interval **[1...100]**

### Examples

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