**Important: rezolvarea acestor exercitii se va trimite prin email, la adresa: daniel.titrade@scoalainformala.ro**

* **Aceasta tema este formata din doua parti.**
* **Fiecare parte va avea propriul ei fisier (tema1.js, tema2.js)**
* **Se va genera o arhiva cu cele doua fisiere, care va fi trimisa prin e-mail**

Exercitii JS, partea 1

Pentru fiecare punct, creati o functie care:

1. Compara 2 valori si seteaza o variabila interna **true** daca sunt egale si **false** daca nu sunt egale
2. Compara 2 valori si seteaza o variabila interna **-1** daca primul e mai mic ca al doilea, **0** daca sunt egale si **1** daca primul e mai mare ca al doilea
3. Primeste 2 valori si salveaza intr-o variabila interna maximul dintre cele 2
4. Primeste 2 valori si salveaza intr-o variabila interna minimul dintre cele 2
5. Calculeaza suma primelor N numere naturale pozitive
6. O functie care verifica daca N este numar prim
7. O functie care intoarce suma primelor N numere prime, incepand de la 0
8. Calculeaza produsul primelor N numere impare pozitive
9. Calculeaza factorialul unui numar
10. Calculeaza cel mai mare divizor comun al 2 numere
11. Calculeaza cel mai mic multiplu comun al 2 numere
12. Verifica daca un numar este palindrom (ex: 121, 1234321)

Exercitii JS, partea 2

**1.** Write a Java program to convert temperature from Fahrenheit to Celsius degree.   
*Test Data*  
Input a degree in Fahrenheit: 212  
*Expected Output*:  
212.0 degree Fahrenheit is equal to 100.0 in Celsius

**2.** Write a JavaScript program that reads a number in inches, converts it to meters.   
Note: One inch is 0.0254 meter.  
*Test Data*  
Input a value for inch: 1000  
*Expected Output* :  
1000.0 inch is 25.4 meters

**3.** Write a JavaScript program that reads an integer between 0 and 1000 and adds all the digits in the integer.

*Test Data*  
Input an integer between 0 and 1000: 565  
*Expected Output* :  
The sum of all digits in 565 is 16

**4.** Write a JavaScript program to convert minutes into a number of years and days.

*Test Data*  
Input the number of minutes: 3456789  
*Expected Output* :  
3456789 minutes is approximately 6 years and 210 days

**5.** Write a JavaScript program that prints the current time in GMT.

*Test Data*  
Input the time zone offset to GMT: 256  
*Expected Output*:  
Current time is 23:40:24

**6.** Write a JavaScript program to compute body mass index (BMI).

*Test Data*  
Input weight in pounds: 452  
Input height in inches: 72  
*Expected Output*:  
Body Mass Index is 61.30159143458721

**7.** Write a JavaScript program that accepts two integers from the user and then prints the sum, the difference, the product, the average, the distance (the difference between integer), the maximum (the larger of the two integers), the minimum (smaller of the two integers).

*Test Data*  
Input 1st integer: 25   
Input 2nd integer: 5  
*Expected Output* :  
Sum of two integers: 30  
Difference of two integers: 20  
Product of two integers: 125  
Average of two integers: 15.00  
Distance of two integers: 20  
Max integer: 25   
Min integer: 5

**8.** Write a JavaScript program to break an integer into a sequence of individual digits.

*Test Data*  
Input six non-negative digits: 123456  
*Expected Output* :  
1 2 3 4 5 6

**9.** Write a JavaScript program to print the result of the following operations.   
Test Data:  
a. -5 + 8 \* 6  
b. (55+9) % 9   
c. 20 + -3\*5 / 8   
d. 5 + 15 / 3 \* 2 - 8 % 3   
Expected Output :  
43   
1   
19   
13

**10.** Write a JavaScript program to check if a string starts with a specified word.    
Sample Data: string1 = "Hello how are you?"

**11**. Write a JavaScript program to display the system time.    
Sample Output:

Current Date time: Fri Jun 16 14:17:40 IST 2017

**12.** Write a JavaScript program to reverse a string.    
Input Data:  
Input a string: The quick brown fox   
Expected Output

Reverse string: xof nworb kciuq ehT