1. Ejercicios (ahora siempre hay que testear)

- 1. Crea una función que sea capaz de coger dos sets y ver qué valores están en ambos.
- 2. Crea una función que sea capaz de coger dos sets y juntarlos en un tercer set, ¿habrá valores repetidos?
- 3. Crea una función que saque un set con los valores diferentes entre dos sets dados.
- 4. Crea una función para ver si un set es un subset de otro.
- 5. Crea una función para encontrar el valor máximo y el valor mínimo de un set
- 6. Crea una función para obtener todos los valores de un set que estén entre dos rangos (numéricos)
- 7. Crea una función que printee por consola todos los pares key value de un map.
- 8. Haz todos los ejercicios de la página: https://www.w3resource.com/javascript-exercises/javascript-regexp-exercises.php
 - **1.** Write a JavaScript program to test the first character of a string is uppercase or not.
 - 2. Write a JavaScript program to check a credit card number.
 - **3.** Write a pattern that matches e-mail addresses. The personal information part contains the following ASCII characters.
 - Uppercase (A-Z) and lowercase (a-z) English letters.
 - Digits (0-9).
 - Characters!#\$%&'*+-/=?^_`{|}~
 - Character . (period, dot or fullstop) provided that it is not the first or last character and it will not come one after the other.
 - **4.** Write a JavaScript program to search a date within a string.
 - **5.** Write a JavaScript program that work as a trim function (string) using regular expression.

- **6.** Write a JavaScript program to count number of words in string. *Note*:
- Remove white-space from start and end position.
- Convert 2 or more spaces to 1.
- Exclude newline with a start spacing.
- **7.** Write a JavaScript function to check whether a given value is IP value or not.
- **8.** Write a JavaScript function to count the number of vowels in a given string.

Test Data:

console.log(alphabetize_string('United States'));

Output:

"SUadeeinsttt"

- **9.** Write a JavaScript function to check whether a given value is an valid url or not.
- **10.** Write a JavaScript function to check whether a given value is alpha numeric or not.
- **11.** Write a JavaScript function to check whether a given value is time string or not.
- **12.** Write a JavaScript function to check whether a given value is US zip code or not.
- **13.** Write a JavaScript function to check whether a given value is UK Post Code or not.
- **14.** Write a JavaScript function to check whether a given value is Canada Post Code or not.
- **15.** Write a JavaScript function to check whether a given value is a social security number or not.
- 9. Si quieres seguir con las expresiones regulares: https://learnbyexample.github.io/learn js regexp/Exercise soluti ons.html

- 10.Haz todos los ejercicios de fechas de esta página: https://www.w3resource.com/javascript-exercises/javascript-date-exercises.php
 - **1.** Write a JavaScript function to check whether an `input` is a date object or not. Go to the editor

```
Test Data:
console.log(is_date("October 13, 2014 11:13:00"));
console.log(is_date(new Date(86400000)));
console.log(is_date(new Date(99,5,24,11,33,30,0)));
console.log(is_date([1, 2, 4, 0]));
Output:
```

2. Write a JavaScript function to get the current date.

```
Note: Pass a separator as an argument. 

Test Data: console.log(curday('/')); console.log(curday('-')); 

Output: "11/13/2014"
```

3. Write a JavaScript function to get the number of days in a month.

```
Test Data:
```

"11-13-2014"

false

```
console.log(getDaysInMonth(1, 2012));
console.log(getDaysInMonth(2, 2012));
console.log(getDaysInMonth(9, 2012));
console.log(getDaysInMonth(12, 2012));
Output:
31
29
30
31
```

4. Write a JavaScript function to get the month name from a particular date.

```
Test Data:
console.log(month_name(new Date("10/11/2009")));
console.log(month_name(new Date("11/13/2014")));
Output:
"October"
"November"
5. Write a JavaScript function to compare dates (i.e. greater than, less
than or equal to).
Test Data:
console.log(compare_dates(new Date('11/14/2013 00:00'), new
Date('11/14/2013 00:00')));
console.log(compare_dates(new Date('11/14/2013 00:01'), new
Date('11/14/2013 00:00')));
console.log(compare_dates(new Date('11/14/2013 00:00'), new
Date('11/14/2013 00:01')));
Output:
"Date1 = Date2"
"Date1 > Date2"
"Date2 > Date1"
6. Write a JavaScript function to add specified minutes to a Date
object.
Test Data:
console.log(add_minutes(new Date(2014,10,2), 30).toString());
Output:
"Sun Nov 02 2014 00:30:00 GMT+0530 (India Standard Time)"
Write a JavaScript function to test whether a date is a weekend.
Note: Use standard Saturday/Sunday definition of a weekend.
Test Data:
console.log(is_weekend('Nov 15, 2014'));
console.log(is_weekend('Nov 16, 2014'));
console.log(is_weekend('Nov 17, 2014'));
Output:
"weekend"
```

```
"weekend"
undefined
8. Write a JavaScript function to get difference between two dates in
days.
Test Data:
console.log(date_diff_indays('04/02/2014', '11/04/2014'));
console.log(date_diff_indays('12/02/2014', '11/04/2014'));
Output:
216
-28
9. Write a JavaScript function to get the last day of a month.
Test Data:
console.log(lastday(2014,0));
console.log(lastday(2014,1));
console.log(lastday(2014,11));
Output:
31
28
31
10. Write a JavaScript function to calculate 'yesterday day'.
Test Data:
console.log(yesterday('Nov 15, 2014'));
console.log(yesterday('Nov 16, 2015'));
console.log(yesterday('Nov 17, 2016'));
Output:
"Fri Nov 14 2014 00:00:00 GMT+0530 (India Standard Time)"
"Sun Nov 15 2015 00:00:00 GMT+0530 (India Standard Time)"
"Wed Nov 16 2016 00:00:00 GMT+0530 (India Standard Time)"
```

11. Write a JavaScript function to get the maximum date from an array of dates.

```
Test Data: console.log(max_date(['2015/02/01', '2015/02/02', '2015/01/03']));
```

```
Output:
```

"2015/02/02"

12. Write a JavaScript function to get the minimum date from an array of dates.

```
Test Data:
console.log(min_date(['2015/02/01', '2015/02/02', '2015/01/03']));
Output:
"2015/01/03"
```

13. Write a JavaScript function that will return the number of minutes in hours and minutes.

```
Test Data:
console.log(timeConvert(200));
Output:
"200 minutes = 3 hour(s) and 20 minute(s)."
```

14. Write a JavaScript function to get the amount of days of a year.

```
Test Data:
console.log(days_of_a_year(2015));
365
console.log(days_of_a_year(2016));
366
```

15. Write a JavaScript function to get the quarter (1 to 4) of the year.

```
Test Data:
console.log(quarter_of_the_year(new Date(2015, 1, 21)));
2
console.log(quarter_of_the_year(new Date(2015, 10, 18)));
4
```

11.Para practicar con módulos, vete a esta página web y ejecuta el ejercicio completo: https://education.launchcode.org/intro-to-professional-web-dev/appendices/exercise-solutions/modules.html#modules-solutions3

BIBLIOGRAFÍA

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- 3. https://education.launchcode.org/intro-to-professional-web-dev/appendices/exercise-solutions/modules.html#modules-solutions3, 2022-07-21