

```
const validateDni = (dni) => {
  const validChars = 'TRWAGMYFPDXBNJZSQVHLCKET'
  const nifRexp = /^[0-9]{8}[TRWAGMYFPDXBNJZSQVHLCKET]{1}$/i
  const nieRexp = /^[XYZ]{1}[0-9]{7}[TRWAGMYFPDXBNJZSQVHLCKET]{1}$/i
  const str = dni.toString().toUpperCase()

  if(!nifRexp.test(str) && !nieRexp.test(str)) console.log('DNI incorrecto')

  const nie = str
    .replace(/^[X]/, '0')
    .replace(/^[Y]/, '1')
    .replace(/^[Z]/, '2')

  const letter = str.substr(-1)
  const charIndex = parseInt(nie.substr(0, 8)) % 23

  if(validChars.charAt(charIndex) === letter) console.log('DNI válido')

  console.log('DNI incorrecto')
}

const validateEmail = (email) => {
  const emailRegex = /^(?<(>)\[\]\[\.\.:\\s@"]+(\.^[<(>)\[\]\[\.\.:\\s@"]+)*|(".*"))@((\[[0-9]{1,3}\. [0-9]{1,3}\. [0-9]{1,3}\. [0-9]{1,3}\]|(( [a-zA-Z-0-9]+\. )+[a-zA-Z]{2,})))$/

  if(emailRegex.test(email)) console.log('email válido')
  else console.log('email incorrecto')
}

const validateIban = (iban) => {
  const ibanRegex = /^[A-Z]{2}\s*\t*(\d\d)\s*\t*(\d\d\d\d)\s*\t*(\d\d\d\d)\s*\t*(\d\d)\s*\t*(\d\d\d\d\d\d\d\d\d\d\d\d)/g

  if(ibanRegex.test(iban)) console.log('iban válido')
  else console.log('iban incorrecto')
}

const validatePasswordComplex = (password) => {
  //Should have 1 lowercase letter, 1 uppercase letter, 1 number, 1 special character and be at least 8 characters long
  const passwordRegex = /^(?=(.*[0-9]))(?=.*(?!@#$$%^&*())\[\]\{\}\_\+=~`|:"'<>,. /?])(?=[a-z])(?=[A-Z])(?=.*).{8,}$/
  if(passwordRegex.test(password)) console.log('password válido')
  else console.log('password incorrecto')
}

const validatePasswordModerate = (password) => {
  //Should have 1 lowercase letter, 1 uppercase letter, 1 number, and be at least 8 characters long
  const passwordRegex = /^(?=(.*[0-9]))((?=[A-Za-z0-9])(?=[A-Z])(?=[a-z]))^.{8,}$/
  if(passwordRegex.test(password)) console.log('password válido')
  else console.log('password incorrecto')
}

const validateUsername = (username) => {
  //Alphanumeric string that may include _ and " having a length of 3 to 16 characters "
  const usernameRegex = /^[a-z0-9_ -]{3,16}$/
  if(usernameRegex.test(username)) console.log('username válido')
  else console.log('username incorrecto')
}

const validateUrl = (url) => {
  const urlRegex = /https?:\/\/(www\.)?[-a-zA-Z0-9@:%_\+=~#]{2,256}\. [a-z]{2,6}\b([ -a-zA-Z0-9@:%_\+=.~#() ?&/=]*)/
  if(urlRegex.test(url)) console.log('url válida')
  else console.log('url incorrecta')
}

const validateIP = (ip) => {
  const ipRegex = /((^[\s*((( [0-9] | [1-9] [0-9] | [1 [0-9] {2} | 2 [0-4] [0-9] | 25 [0-5] )) \. ) {3} ([0-9] | [1-9] [0-9] | [1 [0-9] {2} | 2 [0-4] [0-9] | 25 [0-5] ))) \s* $ ) | (^[\s*((( [0-9A-Fa-f] {1,4} : ) {7} ([0-9A-Fa-f] {1,4} | : ) ) | ((( [0-9A-Fa-f] {1,4} : ) {6} (: [0-9A-Fa-f] {1,4} | (( 25 [0-5] | 2 [0-4] \d | 1 \d \d | [1-9] ? \d ) ( \. ( 25 [0-5] | 2 [0-4] \d | 1 \d \d | [1-9] ? \d ) ) {3} ) | : ) ) | (( [0-9A-Fa-f] {1,4} : ) {5} ((( : [0-9A-Fa-f] {1,4} ) {1,2} ) | : (( 25 [0-5] | 2 [0-4] \d | 1 \d \d | [1-9] ? \d ) ( \. ( 25 [0-5] | 2 [0-4] \d | 1 \d \d | [1-9] ? \d ) ) {3} ) | : ) ) | (( [0-9A-Fa-f] {1,4} : ) {4} ((( : [0-9A-Fa-f] {1,4} ) {1,3} ) | (( : [0-9A-Fa-f] {1,4} ) ? : (( 25 [0-5] | 2 [0-4] \d | 1 \d \d | [1-9] ? \d ) ( \. ( 25 [0-5] | 2 [0-4] \d | 1 \d \d | [1-9] ? \d ) ) {3} ) ) | : ) ) | (( [0-9A-Fa-f] {1,4} : ) {3} ((( : [0-9A-Fa-f] {1,4} ) {1,4} ) | (( : [0-9A-Fa-f] {1,4} ) {0,2} : (( 25 [0-5] | 2 [0-4] \d | 1 \d \d | [1-9] ? \d ) ( \. ( 25 [0-5] | 2 [0-4] \d | 1 \d \d | [1-9] ? \d ) ) {3} ) ) | : ) ) | (( [0-9A-Fa-f] {1,4} : ) {2} ((( : [0-9A-Fa-f] {1,4} ) {1,5} ) | (( : [0-9A-Fa-f] {1,4} ) {0,3} : (( 25 [0-5] | 2 [0-4] \d | 1 \d \d | [1-9] ? \d ) ( \. ( 25 [0-5] | 2 [0-4] \d | 1 \d \d | [1-9] ? \d ) ) {3} ) ) | : ) ) | (( [0-9A-Fa-f] {1,4} : ) {1} ((( : [0-9A-Fa-f] {1,4} ) {1,6} ) | (( : [0-9A-Fa-f] {1,4} ) {0,4} : (( 25 [0-5] | 2 [0-4] \d | 1 \d \d | [1-9] ? \d ) ( \. ( 25 [0-5] | 2 [0-4] \d | 1 \d \d | [1-9] ? \d ) ) {3} ) ) | : ) ) | (( : (( : [0-9A-Fa-f] {1,4} ) {1,7} ) | (( : [0-9A-Fa-f] {1,4} ) {0,5} : (( 25 [0-5] | 2 [0-4] \d | 1 \d \d | [1-9] ? \d ) ( \. ( 25 [0-5] | 2 [0-4] \d | 1 \d \d | [1-9] ? \d ) ) {3} ) ) | : ) ) ) ) (%.+)? \s* $ ))/g
  if(ipRegex.test(ip)) console.log('ip válido')
  else console.log('ip incorrecta')
}

const validateHexadecimal = (hexadecimal) => {
  const hexadecimalRegex = /^#?([a-f0-9]{6}|[a-f0-9]{3})$/
  if(hexadecimalRegex.test(hexadecimal)) console.log('hexadecimal válido')
  else console.log('hexadecimal incorrecto')
}

const validateCreditCard = (card) => {
  const creditCardRegex = /^(?:4[0-9]{12}(?:[0-9]{3})?|[25][1-7][0-9]{14}|6(?:011[5[0-9][0-9]])[0-9]{12}|3[47][0-9]{13}|3(?:0[0-5]|[68][0-9])[0-9]{11}|(?:2131|1800|35\d{3})\d{11})$/
  if(creditCardRegex.test(card)) console.log('card válido')
  else console.log('card incorrecto')
}

validateEmail('dorian@gmail.com')
```