

# LABORATORIO #6

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In [1]:

```
import numpy as np
import pandas as pd
import re
```

PREGUNTA 1: Identificar placas particulares Guatemala

In [2]:

```
placas = ['P221MRQ',
          'M056PWS',
          'P345ABT',
          'P566CPD',
          'XC324B']
print(placas)
```

```
['P221MRQ', 'M056PWS', 'P345ABT', 'P566CPD', 'XC324B']
```

In [3]:

```
r = re.compile('[P]+[\d{3}]+[BCDFGHJKLMNPQRSTVW{3}]')
placas_particulares = list(filter(r.match, placas))
print(placas_particulares)
```

```
['P221MRQ', 'P566CPD']
```

PREGUNTA 2: validar .jpg y .pdf

In [4]:

```
tarchivos = ['Ejemplo1.pdf',
            'prueba2.PDF',
            'holahola',
            'respuestas_del_examen.jpg',
            'amor.JPG',
            'doc.doc']
print(tarchivos)
```

```
['Ejemplo1.pdf', 'prueba2.PDF', 'holahola', 'respuestas_del_examen.jpg',
 'amor.JPG', 'doc.doc']
```

In [5]:

```
r = re.compile('[a-zA-Z]+[\\d|\\.|-|_]+\\w+.[PDF|pdf|JPG|jpg]')
urls_result = list(filter(r.match, tarchivos))
print(urls_result)
```

```
['Ejemplo1.pdf', 'prueba2.PDF', 'respuestas_del_examen.jpg', 'amor.JPG']
```

PREGUNTA 3: validacion contrasena

In [6]:

```
password = ['Seguro869',
            'cont123A@BC',
            'Nombre12?',
            '123#h', 'Abcdd!8']
print(password)
```

```
['Seguro869', 'cont123A@BC', 'Nombre12?', '123#h', 'Abcdd!8']
```

In [7]:

```
r = re.compile('^(?=.*[a-z])(?=.*[A-Z])(?=.*\\d)(?=.*[@$!%*#?&])[A-Za-z\\d@$!%*#?&]{8,}$')
password_result = list(filter(r.match, password))
print(password_result)
```

```
['cont123A@BC', 'Nombre12?']
```

PREGUNTA 4: validacion carnet

In [8]:

```
carnet = ['30001150',
          '15002130',
          '40001325',
          '103215', '1008999', '00003421']
print(carnet)
```

```
['30001150', '15002130', '40001325', '103215', '1008999', '00003421']
```

In [9]:

```
r = re.compile('^[1-9]|[12][0-9]|30)00(11[1-8][0-9]|119[0-9]|1[2-9][0-9]{2}|[2-7][0-9]{3}|8[0-8][0-9]{2}|89[0-6][0-9]|8970)$')
carnet_result = list(filter(r.search, carnet))
print(carnet_result)
```

```
['30001150', '15002130']
```

## PREGUNTA 5: filtrar palabras

In [10]:

```
palabras = ['pit', 'spot', 'spate', 'slap two', 'respite',  
            'pt', 'Pot', 'peat', 'part']  
print(palabras)
```

```
['pit', 'spot', 'spate', 'slap two', 'respite', 'pt', 'Pot', 'peat', 'par  
t']
```

In [11]:

```
r = re.compile('p.t')  
palabras_result = list(filter(r.search, palabras))  
print(palabras_result)
```

```
['pit', 'spot', 'spate', 'slap two', 'respite']
```

## PREGUNTA 6: validacion telefonos Guatemala

In [12]:

```
telefonos = ['+50254821151', '4210-7640',  
            '52018150', '2434 6854',  
            '11234569', '50211234578',  
            '50242161235', '2345', '50345213698', '+50298765432', '12345678']  
print(telefonos)
```

```
['+50254821151', '4210-7640', '52018150', '2434 6854', '11234569', '50211  
234578', '50242161235', '2345', '50345213698', '+50298765432', '1234567  
8']
```

In [13]:

```
r = re.compile('^(\\+)?(502)?([2456])(\\d{3})([-|\\s]?)(\\d{4})$')  
telefonos_result = list(filter(r.search, telefonos))  
print(telefonos_result)
```

```
['+50254821151', '4210-7640', '52018150', '2434 6854', '50242161235']
```

## PREGUNTA 7: validacion correos UFM

In [14]:

```
correos = ['mfloresg@ufm.edu',  
           'm132_25@ufm.edu',  
           'juan@gmail.com',  
           'ana@ufm.gt',  
           'universidad@correo.edu']  
print(correos)
```

```
['mfloresg@ufm.edu', 'm132_25@ufm.edu', 'juan@gmail.com', 'ana@ufm.gt',  
'universidad@correo.edu']
```

In [15]:

```
r = re.compile('[\w|-|_]+[@]+[ufm]+.[edu]')  
correos_result = list(filter(r.match, correos))  
print(correos_result)
```

```
['mfloresg@ufm.edu', 'm132_25@ufm.edu']
```

PREGUNTA 8: validacion identificador Eurasia

In [16]:

```
eurasia = ['a234687BAGF',  
           '234HFKSL',  
           'cb75JLF',  
           'dc51ADNn']  
print(eurasia)
```

```
['a234687BAGF', '234HFKSL', 'cb75JLF', 'dc51ADNn']
```

In [17]:

```
r = re.compile('([a-z]{0,3})+([2-9]{3})+([A-Z]{3,})')  
correos_eurasia = list(filter(r.match, eurasia))  
print(correos_eurasia)
```

```
['a234687BAGF', '234HFKSL']
```