export pokemon data from public API into table

- requests
- pandas

```
## loop api
import requests
import time
```

```
# test api
url = "https://pokeapi.co/api/v2/pokemon/1"

resp = requests.get(url)
if resp.status_code == 200:
    print("ok")
else:
    print("please check again")
```

```
ok
```

```
resp.json()
```

'ruby-sapphire': {'back_default': 'https://raw.githubusercontent.com/PokeAPI/sprites/master/sprites/pokemon/versions/generation-

```
'ruby-sapphire': {'back_default': 'https://raw.githubusercontent.com/PokeAPI/sprites/master/sprites/pokemon/versions/generation-iii/ruby-sapphire/back/1.png',
```

```
abilities = resp.json()['abilities']
abilities
```

```
[{'ability': {'name': 'overgrow',
    'url': 'https://pokeapi.co/api/v2/ability/65/'},
   'is_hidden': False,
   'slot': 1},
  {'ability': {'name': 'chlorophyll',
    'url': 'https://pokeapi.co/api/v2/ability/34/'},
   'is_hidden': True,
   'slot': 3}]
```

```
resp.json()['abilities'][0]['ability']['name']
```

```
'overgrow'
```

```
for j in abilities:
  print(j)
```

```
{'ability': {'name': 'overgrow', 'url': 'https://pokeapi.co/api/v2/ability/65/'}, 'is_hidden': False, 'slot': 1}
{'ability': {'name': 'chlorophyll', 'url': 'https://pokeapi.co/api/v2/ability/34/'}, 'is_hidden': True, 'slot': 3}
```

```
# prompt: call ability name in resp.json()

abilities = resp.json()['abilities']
ablist = []
for j in abilities:
  print(j['ability']['name'])
  ablist.append(j['ability']['name'])
ablist
```

```
overgrow
chlorophyll
['overgrow', 'chlorophyll']
```

```
# prompt: make ablist in to str

abstr = ", ".join(ablist)
abstr

```

```
'overgrow, chlorophyll'
```

```
resp.json()['forms'][0]['name']
```

```
'bulbasaur'
```

```
stats = resp.json()['stats']
stats
```

```
[{'base_stat': 45,
   'effort': 0,
   'stat': {'name': 'hp', 'url': 'https://pokeapi.co/api/v2/stat/1/'}},
  {'base_stat': 49,
   'effort': 0,
   'stat': {'name': 'attack', 'url': 'https://pokeapi.co/api/v2/stat/2/'}},
  {'base_stat': 49,
   'effort': 0,
   'stat': {'name': 'defense', 'url': 'https://pokeapi.co/api/v2/stat/3/'}},
  {'base_stat': 65,
   'effort': 1,
   'stat': {'name': 'special-attack',
    'url': 'https://pokeapi.co/api/v2/stat/4/'}},
  {'base_stat': 65,
   'effort': 0,
   'stat': {'name': 'special-defense',
    'url': 'https://pokeapi.co/api/v2/stat/5/'}},
  {'base_stat': 45,
   'effort': 0,
   'stat': {'name': 'speed', 'url': 'https://pokeapi.co/api/v2/stat/6/'}}]
```

```
stats[0]['stat']['name']
```

```
'hp'
```

```
stats[0]['base_stat']
```

```
45
```

```
## loop api
import requests
import time

numbers = []
names = []
abilities_ = []
masses = []
hp_ = []
atk_ = []
def_ = []
spatk_ = []
spdef_ = []
spd_ = []
for i in range(6):
    url = f"https://pokeapi.co/api/v2/pokemon/{i+1}"

    response = requests.get(url)
    number = str(i)
    name = response.json()['forms'][0]['name']
    abilities = response.json()['abilities']
    ability = []
    for j in abilities:
        ability.append(j['ability']['name'])
    ability = ", ".join(ability)
    mass = response.json()['weight']
    masses.append(mass)

    stats = response.json()['stats']
    hp = stats[0]['base_stat']
    atk = stats[1]['base_stat']
    deff = stats[2]['base_stat']
    spatk = stats[3]['base_stat']
    spdef = stats[4]['base_stat']




    numbers.append(number)
    names.append(name)
    abilities_.append(ability)

    hp_.append(hp)
    atk_.append(atk)
    def_.append(deff)
    spatk_.append(spatk)
    spdef_.append(spdef)

    print(name)
    time.sleep(1)


```

```
bulbasaur
ivysaur
venusaur
charmander
charmeleon
charizard
```

```
print(numbers)
print(names)
print(abilities_)
```

```
['0', '1', '2', '3', '4', '5']
['bulbasaur', 'ivysaur', 'venusaur', 'charmander', 'charmeleon', 'charizard']
['overgrow, chlorophyll', 'overgrow, chlorophyll', 'overgrow, chlorophyll', 'blaze, solar-power', 'blaze, solar-power', 'blaze, solar-po
```

```
import pandas as pd
```

```
import pandas as pd
df = pd.DataFrame({'id'         : numbers,
                   'name'       : names,
                   'weight'     : masses,
                   'abilites'   : abilities_,
                   'hp'         : hp_,
                   'atk'        : atk_,
                   'def'        : def_,
                   'spatk'      : spatk_,
                   'spdef'      : spdef_})
df
```

	id	name	weight	abilites	hp	atk	def	spatk	spdef
0	0	bulbasaur	69	overgrow, chlorophyll	45	49	49	65	65
1	1	ivysaur	130	overgrow, chlorophyll	60	62	63	80	80
2	2	venusaur	1000	overgrow, chlorophyll	80	82	83	100	100
3	3	charmander	85	blaze, solar-power	39	52	43	60	50
4	4	charmeleon	190	blaze, solar-power	58	64	58	80	65
5	5	charizard	905	blaze, solar-power	78	84	78	109	85

Next steps: Generate code with df | View recommended plots | New interactive sheet