zad 1
Wszystkie skrypty robiłem w pythonie więc helpa dodaje za pomocą “argparse”

```python
import requests
import argparse

def get_currency_data(currency_code):
    URL = f"http://api.nbp.pl/api/exchangerates/rates/A/{currency_code}/last/5/"
    response = requests.get(URL)
    data = response.json()
    dates = []
    currencies = []

    for line in data['rates']:
        dates.append(line['effectiveDate'])
        currencies.append(line['mid'])

    return dates, currencies

def calculate_differences(values):
    differences = [values[i] - values[i-1] for i in range(1, len(values))]
    return differences

def main():
    currency_code = input("Podaj kod waluty (np. USD, EUR):").upper()
    dates, values = get_currency_data(currency_code)

    print(f"Kursy waluty {currency_code} z ostatnich 5 dni:")

    for date, value in zip(dates, values):
        print(f"{date}: {value}")

    differences = calculate_differences(values)
    print("\nRóżnice między kolejnymi dniami:")

    for date, difference in zip(dates[1:], differences):
        print(f"{date}: {difference}")

if __name__ == "__main__":

    parser = argparse.ArgumentParser("Prosty skrypt do sprawdzania kurs walut i porownywania ich z ostatnich 5 dni")

    args = parser.parse_args()
    main(args)
```

użycie i output:

```
┌──(kali㉿kali)-[~/lab9]
└─$ python zad1.py -h
usage: Prosty skrypt do sprawdzania kurs walut i porownywania ich z ostatnich 5 dni [-h]

options:
  -h, --help  show this help message and exit
```

zad 2

```python
import requests
import argparse

parser = argparse.ArgumentParser("Wyszukiwarka artykułów. Należy
podać temat i nacisnąć enter")
args = parser.parse_args()

print("Podaj temat: ")
subject = input()

url =
f'https://newsapi.org/v2/everything?q={subject}&sortBy=publishedAt
&apiKey=4eea569493164a78b91ed6188377b655'

data = requests.get(url)

jsonData = data.json()

for article in jsonData['articles']:
    print(f"tytuł: {article['title']}")
    print(f"url: {article['url']}")
    print('\n')
```

```
(venv) kamilslimak@kamilslimaks-macbook~/P/news> python main.py -h
/Users/inmos/PycharmProjects/news/venv/lib/python3.8/site-packages/urllib3/__init__.p
ompiled with 'LibreSSL 2.8.3'. See: https://github.com/urllib3/urllib3/issues/3020
  warnings.warn(
usage: Wyszukiwarka artykułów. Należy podać temat i nacisnąć enter [-h]

optional arguments:
  -h, --help  show this help message and exit
(venv) kamilslimak@kamilslimaks-macbook~/P/news>
```

zad 3

```python
import shodan
import argparse

parser = argparse.ArgumentParser("Program do sprawdzania otwartych
portów za pomocą Shodan API")
parser.parse_args()

def shodan_ip_info(api_key, ip_address):
    # Inicjalizacja klienta Shodan
```

```
    api = shodan.Shodan(api_key)

    # Pobranie informacji na temat adresu IP
    host = api.host(ip_address)


    print(f"Organizacja: {host['org']}")
    print(f"Pochodzenie: {host['country_name']}")
    print(f"Miasto: {host['city']}")

    print("Otwarte porty:")
    for port in host['ports']:
        print(f" - {port}")




api_key = 'jtmzwhxHT1CRUm5vQcmNTbQr8keMDOyS'
ip_address = input("Podaj adres IP: ")

shodan_ip_info(api_key, ip_address)
```

```
(venv) kamilslimak@kamilslimaks-macbook~/P/openPorts> python main.py -h
/Users/inmos/PycharmProjects/openPorts/venv/lib/python3.8/site-packages/ur
 is compiled with 'LibreSSL 2.8.3'. See: https://github.com/urllib3/urllib
  warnings.warn(
usage: Program do sprawdzania otwartych portów za pomocą Shodan API [-h]

optional arguments:
  -h, --help  show this help message and exit
(venv) kamilslimak@kamilslimaks-macbook~/P/openPorts>
```

Link do repozytorium https://github.com/camyk991/Scripting-labs