

Laboratory work 1

Topic: Jupyter Notebook Basics

Goal: Learning the specifics of using Python language in Jupyter Notebook.

1. Jordan Country Profile

Area : 89,342 km² (34,495 sq mi)

Population: 11.5 million

making it the eleventh-most populous Arab country.

1. Country government type and capital

Government: Kingdom form of government

Capital: Amman

2. Jordanian public figures

Rana Dajani – Academics

Usame Haccac – Artists

Diana Karazon – Musicians

3. Languages spoken in the country

The official language of the country is Arabic.

South Levantine Arabic.

Modern Standard Arabic.

Najdi Arabic.

4. Economic situation of the country means of livelihood

Jordan's economic resource base centers on phosphates, potash, and their fertilizer derivatives; tourism; overseas remittances; and foreign aid. These are its principal sources of hard currency earnings. Lacking coal reserves, hydroelectric power, large tracts of forest or commercially viable oil deposits, Jordan relies on natural gas for 93% of its domestic energy needs

5. Jordan Flag



6. Jordan Map



```
# Function to check if a number is prime
```

```
def is_prime(n):
```

```
    if n <= 1:
```

```
        return False
```

```
    for i in range(2, int(n ** 0.5) + 1):
```

```
        if n % i == 0:
```

```
            return False
```

```
    return True
```

```
# Function to find all primes in the interval [a, b]
```

```
def find_primes_in_interval(a, b):
```

```
    primes = []
```

```
    for num in range(a, b + 1):
```

```
        if is_prime(num):
```

```
            primes.append(num)
```

```
    return primes
```

```
# Test cases for the prime number finder
```

```
def test_task_6():
```

```
    print(f"Primes between 3 and 15: {find_primes_in_interval(3, 15)}")
```

```
    print(f"Primes between 6 and 24: {find_primes_in_interval(6, 24)}")
```

```
# Running the test cases
```

```
test_task_6()
```