**Lab 3. JavaScript Fundamentals. Functions. Attach your code solution after every task.**

**Task 1. Functions**

1. Write a function called 'describeCountry' which takes three parameters:

'country', 'population' and 'capitalCity'. Based on this input, the

function returns a string with this format: 'Finland has 6 million people and its

capital city is Helsinki'

2. Call this function 3 times, with input data for 3 different countries. Store the

returned values in 3 different variables, and log them to the console

function describeCountry(country, population, capital){

    return `${country} has ${population} people and its capital city is ${capital}`;

}

console.log(describeCountry("Kazakhstan", 19000000, "Astana."));

console.log(describeCountry("Russia", 145000000, "Moscow."));

console.log(describeCountry("Ukraine", 44000000, "Kyiv."));

**Task 2. Function Declarations and Expressions**

1. The world population is 7900 million people. Create a function declaration

called 'percentageOfWorld1' which receives a 'population' value, and

returns the percentage of the world population that the given population

represents. For example, China has 1441 million people, so it's about 18.2% of

the world population

2. To calculate the percentage, divide the given 'population' value by 7900

and then multiply by 100

3. Call 'percentageOfWorld1' for 3 populations of countries of your choice,

store the results into variables, and log them to the console

function percentageOfWorld1(country, population){

    let percentage;

    percentage = (population/7900000000)\*100;

    return `${country} has ${population} people, so it's about ${percentage.toFixed(2)}% of the world population`;

}

console.log(percentageOfWorld1("China", 1441000000));

console.log(percentageOfWorld1("Russia", 145000000));

console.log(percentageOfWorld1("Kazakhstan", 19000000));

4. Create a function expression which does the exact same thing, called

'percentageOfWorld2', and also call it with 3 country populations (can be

the same populations

**Task 3.** Arrow Functions

1. Recreate the last assignment, but this time create an arrow function called

'percentageOfWorld3'

const percentageOfWorld1 = ( country, population) => {

    let percentage;

    percentage = (population/7900000000)\*100;

    return `${country} has ${population} people, so it's about ${percentage.toFixed(2)}% of the world population`;

}

console.log(percentageOfWorld1("China", 1441000000));

console.log(percentageOfWorld1("Russia", 145000000));

console.log(percentageOfWorld1("Kazakhstan", 19000000));

**Task 4. Functions Calling Other Functions**

1. Create a function called 'describePopulation'. Use the function type you

like the most. This function takes in two arguments: 'country' and

'population', and returns a string like this: 'China has 1441 million people,

which is about 18.2% of the world.'

2. To calculate the percentage, 'describePopulation' call the

'percentageOfWorld1' you created earlier

let describeCountry = (country, population) =>{

    let percentageOfWorld1 = ((population/7900000000)\*100).toFixed(2);

    console.log(country + " has " + population + " people, which is about " +

    percentageOfWorld1 + "% of the world.")

}

describeCountry("Kazakhstan", 19000000);

describeCountry("Russia", 145000000);

describeCountry("Ukraine", 44000000);

3. Call 'describePopulation' with data for 3 countries of your choice

let percentageOfWorld = (population) => {

    let percentage;

    percentage = ((population/7900000000)\*100).toFixed(2);

    return percentage;

}

let describeCountry = (country, population) =>{

    let percentageOfWorld1 = percentageOfWorld(population);

    console.log(country + " has " + population + " people, which is about " +

    percentageOfWorld1 + "% of the world.")

}

describeCountry("Kazakhstan", 19000000);

describeCountry("Russia", 145000000);

describeCountry("Ukraine", 44000000);

**Task 5.**

Type a function to get the amount of days of a year.

Test Data :

console.log(days\_of\_a\_year(2021));

365

console.log(days\_of\_a\_year(2022));

366

function days\_of\_a\_year(x){

    let days;

    if((x%400==0) || (x%4==0) && (x%100!=0)){

        days = 366;

    }

    else{

        days = 365;

    }

    return days;

}

console.log(days\_of\_a\_year(2020))

console.log(days\_of\_a\_year(2021))

let days\_of\_a\_year = (x) => {

    let days;

    if((x%400==0) || (x%4==0) && (x%100!=0)){

        days = 366;

    }

    else{

        days = 365;

    }

    console.log(days);

}