Exercises User Defined Functions

Exercise 1: Vat calculator

Create two variables ‘**price**’ and ‘**vat**’, and create a function called ‘**calculateVat**’ that takes two parameters, and returns a variable ‘**calculatedPrice**’. Print out the price, vat and total price.

Expected output -> (Price is: ‘**price**’, Vat is: ‘**vat**’, Total price is: ‘**calculateVat**’)

Exercise 2: Leap year

Create a variable ‘**year**’ and create a function ‘**isLeapYear**’ that checks if the year is a leap year. If it is a leap year, return a **Boolean** value. In the exercises of the control structures, we discussed what a leap year is.

Expected output -> (‘year’ is a leap year’)
(‘year is not a leap year’)

Exercise 3: Calculator

Create two variables ‘**num1**’ and ‘**num2**’ and create four functions ‘**addNumbers**’, ‘**subtractNumbers**’, ‘**multiplyNumbers**’ and ‘**divideNumbers**’. The function accepts two parameters, and return the addition, subtraction, multiplicity and division of the two numbers.

Expected output -> (‘Addition of ‘num1’ and ‘num2’ is ‘addnumbers’)
(‘Subtraction of ‘num1’ and ‘num2’ is ‘addnumbers’)
(‘Multiplicity of ‘num1’ and ‘num2’ is ‘addnumbers’)
(‘Division of ‘num1’ and ‘num2’ is ‘addnumbers’)

Exercise 4: Swapping numbers

Create a function ‘**swapNumbers**’ that takes two parameters ‘**num1**’ and ‘**num2**’, and inside the function, that swaps the numbers.

Expected output-> (‘Before swapping: num1 = 4, num2 = 8’);
(‘After swapping: num1 = 8, num2 = 4’)

Exercise 5: Even or Odd

Create a function ‘**evenOrNot**’ that checks if a given number ‘**num1**’ is even or odd. Echo the expected output.

Expected output -> (‘Num1 is even’)
-> (‘Num1 is odd’)

Exercise 6: Prime number

Create a function ‘**isPrime**’ that checks if ‘**num1**’ is a prime number or not. Return true if it is a prime number and return false if it is not a prime number.

Expect output -> (‘num1 is a prime number’)
(‘num1 is not a prime number’)