JSF – Part 1
Exercises

Table of Contents

Basics 01 – Names, Variables

BASIC01-001: Write ten correct identifiers, following the camelCase naming convention.

BASIC01-002: Imagine, you are solving a math problem. Declare ten variables, which you might need in your program.

BASIC01-003: Imagine, you are working for a cloud provider and are responsible for the servers. You must write a program to list and describe the servers. Declare ten variables, which you might need in your program.

BASIC01-004: Print on the console five alphabet characters, five numbers, five punctuation characters.

BASIC01-005: Declare five variables, assign some numbers, and print them on the console.

BASIC01-006: Declare ten variables, assign the numbers from 1 to 10 and print the even numbers on the console.

BASIC01-007: Declare ten variables, assign the numbers from 1 to 10 and print the first three odd numbers on the console.

BASIC01-008: Declare ten variables, assign the numbers from 100 to 109 and print the last two odd numbers on the console.

BASIC01-009: Declare five variables, assign the first five prime numbers, and print them on the console.

BASIC01-010: Declare ten variables. On the first five - assign the first five prime numbers. On the second five numbers, do the same, but multiply each value by 3. Print all of them on the console.

BASIC01-011: Declare ten variables. Assign them the first ten prime numbers. Print the numbers in reverse order.

Basics 02 – Character Set

BASIC02-001: Declare five variables. Assign them with the ASCII codes of the first five English capital alphabet characters. Print them on the console.

BASIC02-002: Declare five variables. Assign them with the ASCII codes of the last five English lowercase alphabet characters. Print them on the console.

BASIC02-003: Declare five variables. Assign them with the ASCII codes of randomly chosen punctuation characters. Print them on the console.

BASIC02-004: Declare five variables. Assign them with the UNICODE codes of randomly chosen emoji characters. Print them on the console – on different lines.

BASIC02-005: Declare five variables. Assign them with the UNICODE codes of randomly chosen emoji characters. Print them on the console – on one line, separated with four spaces.

BASIC02-006: Declare five variables. Assign them with the randomly chosen emoji characters. Print the UNICODE codes on the console – on different lines.

BASIC02-007: Declare five variables. Assign them with the randomly chosen emoji characters. Print the UNICODE codes on the console – on one line, separated with commas and space after each comma character.

BASIC02-008: Declare five variables. Assign them with the randomly chosen emoji characters. Print the UNICODE codes in hex format on the console – on different lines.

BASIC02-009: Declare five variables. Assign them with the randomly chosen emoji characters. Print the UNICODE codes in decimal format on the console – on different lines.

BASIC02-010: Declare five variables. Assign them with the randomly chosen emoji characters. For each of the variables - print the UNICODE code in binary, octal, decimal, and hex format on one line, separated with comas and space after it.

BASIC02-011: Declare two variables. Assign them with two English capital alphabet characters. Compare them with the “lower than” operator (<) and print on the console the result.

BASIC02-012: Declare two variables. Assign them with two English alphabet characters – one in capital and the other one in lowercase. Compare them with the “lower than” operator (<) and print on the console the result. Can you describe the result?

BASIC02-013: Declare two variables. Assign them with one English alphabet character and one number character. Compare them with the “greater than” operator (>) and print on the console the result. Can you describe the result?

Basics 03 – Operations, Operators, Precedence

BASIC03-001: Declare two variables and assign them two integer numbers. Print on the console the result of their division.

BASIC03-002: Declare two variables and assign them two integer numbers. Print on the console the division reminder (modulus - остатък от целочислено деление).

BASIC03-003: Declare four variables. On two of them assign integer numbers. The third set with the division reminder. The fourth one set with the quotient (частното -> цялата част от делението). Print on the console the four variables with appropriate description.

BASIC03-004: Define a constant. Check and print on the console if the constant is positive, negative or zero. Hint: Use ternary operators. How many operators do you need?

BASIC03-005: Declare three variables and assign them with three randomly selected integer numbers. Print on the console those two of them, which have the biggest sum. Hint: Use the ternary operators.

BASIC03-006: Declare one variable, assign integer number. Check if the variable contains an even number. Print on the console appropriate message.

BASIC03-007: Declare a constant and assign one digit. Print on one line the constant, the power of two (N^2), the power of three (N^3) on the console.

BASIC03-008: Declare a variable. Assign one digit in the range of [1;9]. Print on the console the multiplication table with that variable.

BASIC03-009: Calculate and print on the console the perimeter of a triangle.

BASIC03-010: Calculate and print on the console the area (лице) of a triangle.

BASIC03-011: Calculate and print on the console the perimeter of a rectangle.

BASIC03-012: Calculate and print on the console the area of a rectangle.

BASIC03-013: Calculate and print on the console the perimeter (the length) of a circle.

BASIC03-014: Calculate and print on the console the area of a circle.

BASIC03-015: Declare a variable. Assign one digit in the range of [1;9]. Print on the console the multiplication table with that variable.

BASIC03-016: A bus leaves from point A to point B with speed of 80 km/h. At the same time, a car leaves from point B to point A with speed of **x** km/h. The distance between point A and point B is **S** kilometers. After how many minutes, the bus, and the car will meet? Print the result on the console.

BASIC03-017: Write a JavaScript program to convert degrees in radians. Print on the console an appropriate message.

BASIC03-018: Write a JavaScript program to convert km/h into km/min. Print on the console an appropriate message.

BASIC03-019: Write a JavaScript program to convert km/h into m/s. Print on the console an appropriate message.

BASIC03-020: Declare a variable. Assign an integer number. Print on the console the variable, the binary, octal and hexadecimal representation.