

# JSF – Part 1

## Exercises

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## 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 commas 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: