

# Exercise 3

In this exercise you learn about logic operators, one and two dimensional tables. You will also extend your knowledge about string processing by learning how to implement a simple cipher in JAVA and how to use the format function.

Please follow the lecture 3 and write every example from this lecture. For every example please execute the code.

1. Write and execute examples about logic operators.
2. Write and execute examples about one dimensional tables.
3. Write and execute examples about two dimensional tables.
4. Write and execute examples about the format function.
5. Write and execute example of Caesar cipher. Execute both the code for message encryption and for cipher decryption.

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6. Write a program that will compute the number of digits in a string. You can use `Character.isDigit()` method.

Example string is :

```
String passwd = "jdj8ns4k1ok";
```

7. Write a program that will compute the value of number  $\pi$  using only the pseudorandom generator. Use function `Math.random` and `Math.sqrt`.