

## Sheet 7 – Switch- and If-statements

Please write all commands in the MATLAB editor into one single m-file and save it in a folder that you specifically dedicate to this workshop. If you don't know how a command is being used type "`help [commandname]`" into the command window. Comment each code line briefly to document what it is doing.

### Exercise 1:

Write a short program that "flips a coin", i.e., that uses a random process to make a decision. Use an if-statement in the code. The output should be on the command line either "head" or "tail".

### Exercise 2:

Write a short program that asks the user for the month the user was born as a number from 1-12. The command `input` is useful here. The program should then output the season in which the user was born. For example after the user has given 5, the program should state: "You were born in spring!". Use a switch-statement here.

### Exercise 3:

Based on the experience in Exercise 1, write a program that throws a dice (with 6 equal sides) twice. After the throws, the results of the two throws should appear in the command window as two subsequent numbers, e.g., "14", "52", "33", "46". If these two numbers are equal (in German: "Pasch") it should additionally output: "You win!" on the command line.