Lab 1 - statements

Statements and expressions in JavaScript.

Use MDN as your reference and base to solving the exercises.

1. If, else if and else

Exercise 1.1 (1 points)

Create five variables: `card1, card2, card3, card4, card5`.

Assign the values `4, 2, 7, 1, 11` to the variables created above.

Add them up and put the sum in a variable called `result`.

Answer with the variable `result`.

Exercise 1.2 (1 points)

Use an `if statement` to see if the five cards (card1-card5) have a combined sum that is higher than 21.

Create a variable `status` and give it a different value depending on the following.

- If the sum is higher than 21, give your variable the value `"busted"`.
- Else give it the value `"safe"`.

Answer with your status-variable.

Exercise 1.3 (1 points)

Use `if else statements` to see if the combined value of the first three cards (card1-card3) is lower, higher or exactly 21.

Answer with a string corresponding to the result:
lower = `"safe"`
higher = `"busted"`
21 = `"black jack"`

Store the response in your status-variable and answer with it.

Exercise 1.4 (2 points)

Create three variables: `dealer1, dealer2, dealer3`.

Assign the values `1, 6, 7` to the variables.

Combine the `if`, `else if`, `else` statements and the operator `AND (&&)` to see what the dealer should do. Combine as you feel needed.

If the sum of the dealercards is lower than 17, answer with `"pick"`, if the sum is higher than or equal to 17 and lower than 21 answer with `"stop"`. If the sum is 21 answer with `"black jack"`. If the sum is higher than 21 answer with `"busted"`.

Store the response in a variable, and answer with it.

PS. You can change the sum to test that your if-statement really works for all values, just to try it out.

2. Switch, case

Exercise 2.1 (1 points)

Use a switch-case statement to create a message with the type of fruit and its color. You have the following type of fruits with a corresponding color:

- banana: yellow
- apple: green
- kiwi: green
- plum: purple

Create a variable `myFruit` which holds the current type of your fruit. If 'myFruit' is banana, the result should be a variable containing the string value `"The banana is yellow."`

Ensure that your switch-case works for all values.

Answer with the result where `myFruit = "plum"`.

Exercise 2.2 (1 points)

Extend your switch-case statement with a `default value`. The result should be:

`"That is an unknown fruit."` when the variable 'myFruit' has an unknown value.

Answer with the result where 'myFruit = pear'.

3. For loops

Exercise 3.1 (1 points)

Use a `for-loop` to increment `481` with the value `6`, `10` times.

Answer with the result.

Exercise 3.2 (1 points)

Use a for-loop to decrement `551` with the value `8`, `10` times.

Answer with the result.

Exercise 3.3 (3 points)

Use a for-loop to add all the even values in the range `22` to `45` to a string with each number separated by a comma `,`.

The result should not end with a comma. You should neither have a space after the comma.

Answer with the resulting string.

4. While loops

Exercise 4.1 (1 points)

Use a `while-loop` to increment `10` with the value `6` until it has reached or passed `481`.

Answer with the amount of steps needed.

Exercise 4.2 (1 points)

Use a while-loop to subtract `8` from `551` until the value has reached or passed `0`.

Answer with the amount of steps needed.

Exercise 4.3 (3 points)

Use a while-loop to add all the values, to a comma-separated string, in the range `28` to `63`, where the value is divisable by 5 or 7.

Answer with the resulting string.