Repetition from week 1

In [1]:
```
my_integer:int = 5
my_float = 3.14
my_string = "gizem"

print(type(my_string))
print(0.1+0.1+0.1)

a = 5
b = 3
c = 5%3
print(c)
```

```
<class 'str'>
0.30000000000000004
2
```

Week 2: Functions

Built-in functions

In [15]:
```
print("Hello")
type(my_integer)

a = -5
abs(a)

b = 3
pow(a,b)

abs(pow(a,b))
pow(abs(a),b)

round(3.1432984620365, 3)
```

```
Hello
```

Out[15]:
```
3.143
```

In [ ]:
```
user_name = input("What is your name? ")
print(user_name)
```

Out[ ]:
```
'g'
```

Make a simple calculator that asks 2 numbers to the user and prints the multiplication of these two numbers.

In [17]:
```
first_number = int(input("First number: "))
second_number = int(input("Second number: "))

print(first_number * second_number)
```

```
15
```

built-in type conversion functions

In [ ]:
```
int()
float()
str()
```

Custom functions

In [ ]:
```
# Definiton of function
def f(x):
    result = 2*x+5
    return result

# Call of the function
print(f(5))
```

```
15
```

In [ ]:
```
print("something")
x = 3
func_result = f(x)
print("result: ", func_result)
```

```
something
result:  11
```

Exercise

Imagine that you are designing an automatic answer system for a small company. A part of the task is to get a selection from the user, and confirm the selected number.

1. Make a custom function that gets an integer number and prints it for confirmation: «The number you entered is X»
2. Ask the user to enter a number (Hint: use input())
3. Call your custom function and confirm the entered number.

In [ ]:
```
def user_confirmation(X):
    print("You entered: ", X)

user_input = input("Give me a number: ")
user_confirmation(user_input)
```

```
You entered:  5
```

Make a function called "my_calculation_func" which takes 2 numbers and prints them like this:

"Sum: XX, Sub:YY, Mult: ZZ, Div: WW"

In [ ]:
```
def my_calculation_func(x, y):
    sum = x+y
    sub = x-y
    mult = x*y
    div = x/y
    print("Sum:", sum, "\nSub:", sub, "\nMult:", mult, "\nDiv:", div)
    # print(f"Sum: {sum}, Sub: {sub}") ## Den kjem seinare

first = int(input("Give me the first number: "))
second = int(input("Give me the second number: "))
my_calculation_func(first, second)
```

```
Sum: 8
Sub: 2
Mult:    15
Div: 1.6666666666666667
Sum: 8, Sub: 2
```

Week 3: If Else

(Conditionals)

In [32]:
```
number = 0

if number < 0:
    print("Negative")
```

```
else:
    print("Positive")
```

```
Positive
```

Several options we use "elif"

In [ ]:
```
number = 0

if number < 0:
    print("Negative")
elif number == 0:
    print("Zero")
else:
    print("Positive")
```

< smaller

> greater <= smaller or equal to = greater or equal to != not equal == equal

Use a variable "number" and check if it is dividable by 2.

In [33]:
```
number = 5

if (number%2 == 0):
    print("Yes, dividable")
else:
    print("No, not dividable")
```

```
No, not dividable
```

Modify the user_confirmation function. Make a new variable called password, and assign a value. If the user enters the password right, print "correct", otherwise print "no access".

In [36]:
```
def user_confirmation(user_input):
    password = "gizem"
    if user_input == password:
        print("correct")
    else:
        print("no access")

user_input = input("Give me the password: ")
user_confirmation(user_input)
```

```
correct
```

DO NOT PRINT IN THE FUNCTION (extra challenge)

In [38]:
```
def user_confirmation(user_input):
    password = "gizem"
    if user_input == password:
        return True
    else:
        return False

user_input = input("Give me the password: ")
print(user_confirmation(user_input))
```

```
False
```

modify the result print:

In [39]:
```
user_input = input("Give me the password: ")
if user_confirmation(user_input) == True:
    print("Correct")
else:
    print("No acces")
```

```
Correct
```

In the user_confirmation function, return an integer or string than True/False

In [40]:
```python
def user_confirmation(user_input):
    password = "gizem"
    if user_input == password:
        return "correct"
    else:
        return "wrong"


user_input = input("Give me the password: ")
if user_confirmation(user_input) == "correct":
    print("Correct")
else:
    print("No acces")
```

```
Correct
```

In [ ]:
```python
a = 5
```