

Nowadays, programs consist of functions that is related to each other in orgazied way.

Functions rules :

- they should be small
- they should be smaller than that
- they should hardly no longer than 20 lines
- no longer than 150 character in a line

Blocks and indenting :

- the block of control and iteration statements should be one line long (It's frequently a function call) It assure the function not be too long , It's also may be a good documentary for the reader if we give a descriptive name to that function
- The level of function should be no longer than one or two levels to be easy to understand

Function should do one thing, they should do it well, they should do it only

Function that do one thing not divided into sections

The code should read like a top-dowon narrative

Choose a descriptive name for the function, the long descriptive name is better than name with long comment to describe it

Functions' arguments shouldn't be more than 3 because it take conceptual power

The more argument is the more testing difficulties happens because we will handle all the arguments to ensure all the arguments work properly

Monadic argument of function is common because it usually asks to check something or do some operations in this argument and return a new a value

There is a second shape of monadic argument called event is not used widely but still used , It takes some thing and not return anything it tell the state of the system

If the input argument is manipulated then it should appear in the output

Flag arguments are ugly, passing argument to a function is a terrible thing, it makes the signature of the function get complicated as a user we will ask for what is the true in addition to it is not satisfy the rule is function do when thing because it will do a thing when it's true and another when it false so we can split this function into two functions

Dyadic function is harder to understand but there situations that you must use it like a point that take start and end so you should be aware of when using it

Tridic functions is more difficult to understand than dyadic function because the complexity is doubled , you should be aware of that

Arguments object is a way used when the number of arguments increases because it make a cheat of wrapping some of them in a class

Argument list , if all arguments treated in a same way , the treated as a list of arguments like format function in string class

Function name should be descriptive for the behaviour to avoid long name for argument