

WUNSCHSCRIPT Programming Language

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Abstract

WUNSCHSCRIPT is a small scripting language which is dynamically typed. It follows the imperative programming paradigm, but also support functional programming and part of object-oriented programming. This document will describe in detail the grammar and behavior of WUNSCHSCRIPT .

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1 Overview

```
1  var Y = (gen) =>
2    ( (f)[gen] => (n)[f, gen] => gen(f(f))(n) ) (
3      (f)[gen] => (n)[f, gen] => gen(f(f))(n)
4    )
5
6  var fac_gen = (g) => (m)[g] => {
7    if m <= 1 {
8      return 1
9    } else {
10     return m * g(m - 1)
11   }
12 }
13
14 # will calculate 5! = 120 and then output
15 print(Y(fac_gen)(5))
```

Listing 1: Y combinator