Introduction

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Last revised August 16, 2021

Stored program computer

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- Set up macros to ease the pain (assembly)
- Set up more macros (low level languages)
- Either compile it back for the computer to read, or get something to interpret it

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Expressions

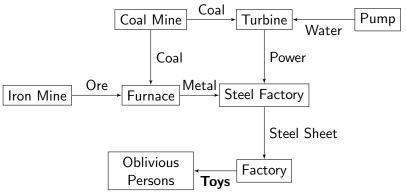
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Expressions produce results.

Abstraction

Abstraction, the wagon of progress.



Functions

Example

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What does this do?
function norm(x, y) {
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Good to know

- display
- math_PI, math_log, ...

Conditionals

The **if**-**else** statement:

```
if (expr) {
    program;
} else if (expr2) {
    program2;
} else {
    program3;
}
```

Expressions
Functions
New operator

Ternary operator

 ${\tt predicate~?~consequent~:~alternative}$

Ternary operator

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Examples

```
• 5 < 2 ? 10 : 100;
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Examples

```
• 5 < 2 ? 10 : 100;
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```
• "a" < "b" ? 1 : 2;
```

Ternary operator

```
{\tt predicate~?~consequent:alternative}
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Examples

```
5 < 2 ? 10 : 100;</li>"a" < "b" ? 1 : 2;</li>"a" < "A" ? 1 : 2;</li>
```

Short circuiting

predicate ? consequent : alternative

Example

What does this do?

```
1 === 2 && display("No")
```

Short circuiting

predicate ? consequent : alternative

Example

```
What does this do?
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Good to know

Some operators are also lazy!

```
1 === 2 ? display("No") : 1;
```

Modulo

• We can do + - * /

Modulo

ullet We can do + - * /

ullet New operator: %