Simula Cheatsheet

Simula is a programming language that is particularly well-suited for simulations and modeling. Here is an overview of some of its unique features and basic syntax.

Variables

Declaration

```
integer i;
real x;
boolean flag;
```

Assignment

```
i := 42;
x := 3.14;
flag := true;
```

Functions

Declaration

```
procedure helloWorld();
begin
    write("Hello, world!");
end;
```

Call

```
helloWorld();
```

Loops

For loop

```
for i := 1 to 10 do
begin
    write(i);
end;
```

While loop

```
while flag do
begin
    write("Looping...");
end;
```

Conditionals

If statement

```
if x > 0 then
begin
    write("Positive");
end;
```

If-else statement

```
if x > 0 then
begin
    write("Positive");
end
else
begin
    write("Non-positive");
end;
```

File manipulation

Reading from a file

```
textFile file;
file.open("filename.txt", "in");
while not file.eof do
begin
    file.readln(line);
    write(line);
end;
file.close();
```

Writing to a file

```
textFile file;
file.open("filename.txt", "out");
file.writeln("Hello, world!");
file.close();
```

Resources

- [Simula Programming Language](#)
- [Simula Tutorial](#)