

Compiladors - Practica 1

Primera practica de compiladors. Desenvolupada sota l'entorn proporcionat per docker.

Requeriments - gcc - flex - bison - make

Docker

```
$ docker build . -t compiladors
$ docker run -v $(pwd):/prac1 -it compiladors /bin/sh
```

Build

```
$ make
```

Clean

```
$ make clean
```

Run

```
$ ./prac1 INPUT_FILE OUTPUT_FILE
```

Exemples

Nom	Descripció	Comanda
default	Exemple de l'enunciat	<pre>\$./prac1 ./inputs/default.txt ./outputs/default.txt</pre>
arithmetic	Exemple d'operacions aritmetiques	<pre>\$./prac1 ./inputs/arithmetic.txt ./outputs/arithmetic.txt</pre>
commentaries	Exemple de comentaris	<pre>\$./prac1 ./inputs/commentaries.txt ./outputs/commentaries.txt</pre>
comparators	Exemple de comparacions	<pre>\$./prac1 ./inputs/comparators.txt ./outputs/comparators.txt</pre>
functions	Exemple de funcions	<pre>\$./prac1 ./inputs/functions.txt ./outputs/functions.txt</pre>

Documentació

Types

int a := 2

float a := 2.0

```
string a := "test"
```

Operations

- + Add
- - Subtract
- * Multiply
- / Divide
- ** Power
- mod Module

Int / float operations

Any operation with floats returns the result as a float.

```
2 + 4 = 6
```

```
2.0 + 4.0 = 6.0
```

```
2 + 4.0 = 6.0
```

String add operation

```
"test" + 1234 = "test1234"
```

```
"test" + "-" + "test" = "test-test"
```

Comparators

- > Greather than
- < Less than
- >= Greather than or equals to
- <= Less than or equals to
- == Equals
- != Different

Functions

- sqrt()
- log()

Notes

Id can't begin with numbers. A file must end with new line.