# XS Tokens

The following is a list of XS tokens

## 1. Operators

## 1.1. Arithmetic Operators

```
\begin{array}{l} \mathrm{PLUS} := \ + \\ \mathrm{MINUS} := \ - \end{array}
```

$$\mathrm{STAR} := \ *$$

$$FSLASH := /$$

## 1.2. Prefix/Postfix Operators

```
\mathrm{DPLUS} := \ +\!\!+
```

$$DMINUS := --$$

#### 1.3. Relational Operators

```
LT := \langle
```

$$GT := >$$

$$\mathrm{LE} := \ <=$$

$$\mathrm{GE} := >=$$

$$DEQ := ==$$

$$NEQ := !=$$

#### 1.4. Boolean Operators

```
AND := &&
```

$$OR := | |$$

## 2. Punctuations

```
EQ := =
```

$$\mathrm{LBRACE} := \ \{$$

$$RBRACE :=$$
}

$$LPAREN :=$$
 (

$$RPAREN := )$$

$$SEMICOLON := ;$$

$$COLON := :$$

$$COMMA :=$$
,

$$DOT := .$$

## 3. Literals

 $\label{eq:FLT} \text{FLT} := \ \mbox{-?\d+.\d+} \text{ where \d} \text{ is a digit}$ 

 $\mathrm{STR} := \text{ "\w*" where \w is a unicode character}$ 

 $\mathrm{BOOL} \coloneqq$  false or true

 $\mathrm{ID} := \ \texttt{[a-zA-Z_][a-zA-Z_0-9]*}$ 

Note: Vectors are part of the grammar and are not treated as literals

## 4. Comments

## 4.1. Single Comment

 $\mathrm{CMT} := \texttt{//[!n]} *$ 

#### 4.2. Multiple Line Comment

 $\mathrm{CMT} := / *. * * /$ 

# XS Keywords

every XS keyword is a token

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