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Compiler Construction Assignment

1. Language Overview

Name: Crypt++

Theme: Encrypted or obfuscated Mini C++ Variant

Purpose

It is a playful language that hides meaning in simple transformation.

It allows "secure looking" code

~~lets~~.

Example

if becomes fi

2. Keywords

Keyword	Equivalent	Example Usage
fi	if	fi (x > 5)
rof	for	rof (i = 0; i < 10; i++)
elinw	while	elinw (x < 5)
esle	else	esle { not here
tni	int	tni x = 0;
taof	float	taof x = 0;
gnirts	String	gnirts word;
nruter	return	nruter 0;
hctiws	switch	hctiws (option)
tsnoc	const	tsnoc tni x = 0;
tuoc	cout	tuoc << "a";
cin	cin	cin >> a;
bool	bool	bool a;

~~doiv~~
~~Kaerb~~
~~Ch~~
rahe

void
break
char

doit franches;
rate a;

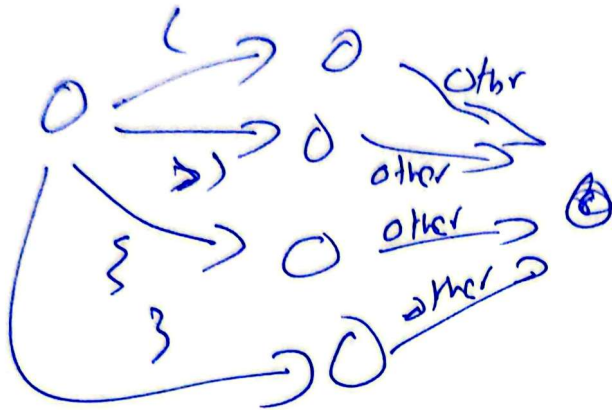
3. Operators and Prune.

Category	Symbol	Desc.
Operator	+	Addition
Operator	-	Subtract
Operator	/	Divide
operator	*	Multiply
Punctuation	()	does what data ^{data} does in normal Ctr
Punctuation	>	does what (does in normal Ctr

4. RE (for some ~~all~~ ^{not all have been} listed)

Type	R.C	Example
Identifier	$\text{pre}(\text{[a-zA-Z0-9_]*})\text{isation}$ $\& \text{[a-zA-Z0-9_]*}\text{itrate}$	prerajulisation tarhanitrate
Numbers	$(+ -)?0[\text{0-9}]^+([\text{0-9}]^+?)$	0010 0099 007 009 0.
Keyword	$(\text{fi} \text{rof} \text{etihw})$	fi
Operator	$(+ - / \&)$	+
Delimiter	(() \< >)	

Delimiter



Exploration

It is designed to look like 'code' text. I was inspired by studying Reverse cipher in Information Security Course. Identifiers were inspired by a scene from the film 3 idiots. Numbers were inspired by James Bond code number 007