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Compiler Construction Assignment

1. Language Overview

Name: Crypt++

Theme: Encrypted or obfuscated Minic++ variant
Purpose

It is a playful language that hides meaning in simple transformation.
It allows "secure looking" code
~~looks~~.

Example

if becomes fi

2. Keywords

Keyword	Equivalent	Example Usage
fi	if	fi(x>5)
rof	for	rof(i=0;j<10;i++)
etihw	while	etihw(x<5)
esle	else	esle{ cout . endl }
tn;	int	tn x=0;
taolf	float	taolf x=0;
gnirts	String	gnirts word;
nruter	return	nruter 0;
neatnltiws	Switch	neatnltiws(option)
tsnoc	Const	tsnoc tn;x=0;
tuoc	cout	tuoc << "a";
nic	cin	nic >> a;
loop	bool	loop a;

doiv
 void
 break
 char

doiv functions
 return a;

3. Operators and Punct.

Category	Symbol	Desc.
Operator	-	Addition
Operator	+	Subtract
Operator	*	Divide
operator	/	Multiply
Punctuation	()	does what does in normal
Punctuation	>	ctrl
		does what (
		does in normal
		ctrl

4. RE (for some ~~others~~ ^{not all however} listed at)

Type	R.E	Example
Identifier	$\text{pre}(\text{[a-zA-Z0-9]}^*)\text{lisation}$ $\& \text{R}(\text{[a-zA-Z0-9]}^*)\text{itrate}$	prajulisation farhanitratre

Numbers $(+/-)0[0-9]^+.(0-9)^+?)$

0010
0009
007
009

Keyword (if | rot | elihw).

.:

Operator / + / - / / | *)

+

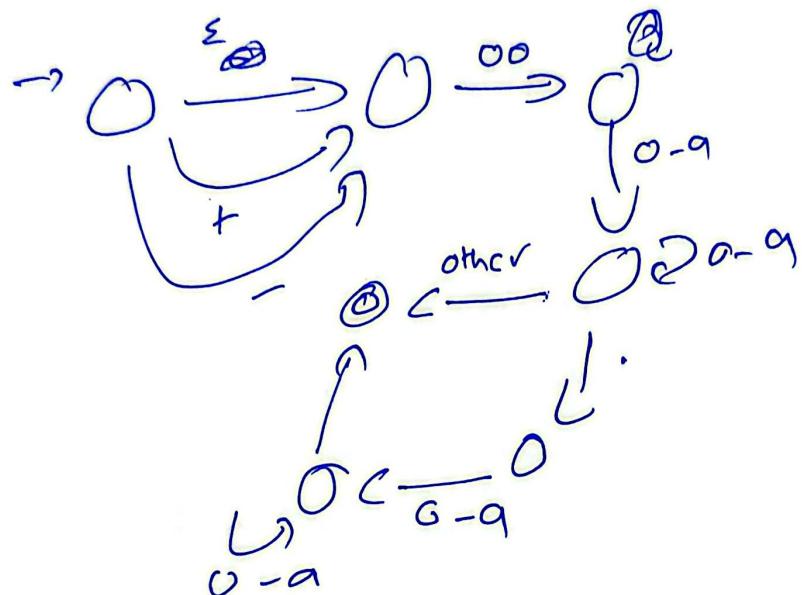
Delimiter ((|) | { | } | [|])

ES FA

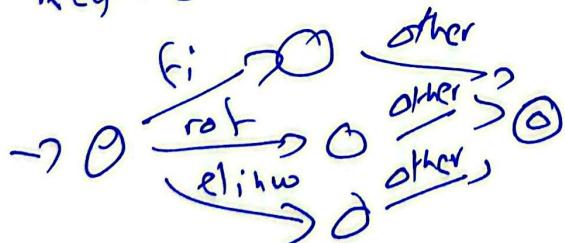
identifier Ca₂A₂O₉.J



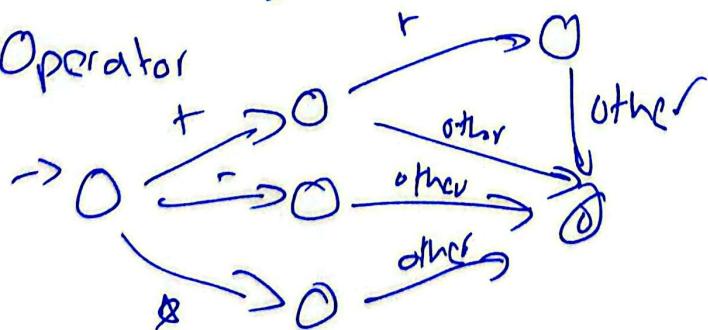
number ✓



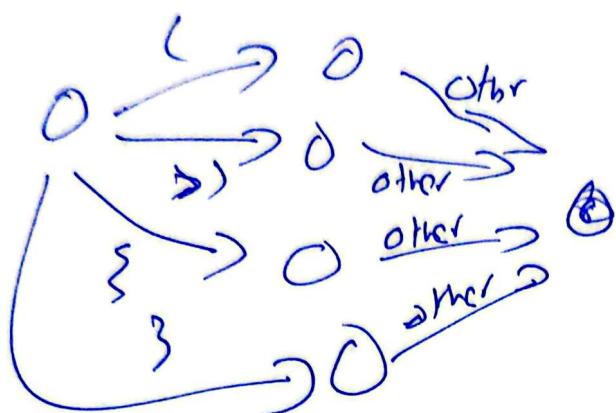
Keyword



Operator



Delimiter



Exploration

It is designed to look like 'Encoded' 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