CC-ASSIGNMENT-1

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(1)
LANGUAGE OVERVIEW

Theme: A Saraiki-inspired programming language for Southern Punjab.

Purpose: Saraiki Script make programming accessible to Saraiki speakers by using native vocabulary and linguistic structures. It allows students from South-Punjab to learn coding in their mother language while maintaining C++ like functionality.

Name: Saraiki Script

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Keywords

#	Keyword	Meaning/Equivalent	Example usage
1	je	if	je(x>0){}
2	bia	else	bia{}
3	jein_tak	while	jein_tak(x<10){x++}
4	wastay	For	wastay(i=0;i<5;i++)
5	kar	do	Kar function()
6	wapas	return	wapas 0;
7	te	and	je(a>0 te b<5)
8	ya	or	je(x==1 ya x==2)
9	koh	not	je(koh condition)
10	Sach	true	bool value= Sach;
11	Koor	false	bool value=Koor;
12	Kaam	Function()	kaam calculate();
13	das	input (cin)	das >> x;
14	vikha	output (cout)	vikha << "Hello";
15	buniyad	main()	int buniyad(){}

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Operators

Category	Symbol	Description
Operator	+	Addition
Operator	-	Subtraction
Operator	*	Multiplication
Operator	/	Division
Operator	=	Assignment

Punctuation

Category	Symbol	Description
Punctuation	;	Statement Terminator
Punctuation	{ }	Block Delimiters
Punctuation	L)	Function Parameters
Punctuation	,	Separator

#	Token Type	Regular Expression	Example
1	Identifier	[a-z A-Z] [a-z A-z 0-9]*	count1, t_sum, _temp
2	Integer	[0-9]+	123, 0, 9432
3	Float	[0-9]+ (. [0-9]+)*	3.14, 0.5
4	keyword	(je | bi al jei -tak | wastey | kar | wapas | te | ya | koh | Sach | Koor | kaam | das | vikha | buniyad)	je, wastey, vikha, das
5	Operator	[\+\-* / =]	+, -, *, /, =
6	increment / Decrement	(\+\+ | --)	++, --
7	white spaces	[\t\n\r]+	spaces, tabs, newlines
8	Delimeter	((|) | {|})	(), {}

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Identifier:

→ v_0 --[a-zA-Z_]--> v_1 --[a-zA-Z_0-9_]*, other--> v_2

Integers:

→ v_0 --[0-9]+--> v_1 --[0-9]+, other--> v_2

Float:

→ v_0 --[0-9]+--> v_1 --.--> v_2 --[0-9]+--> v_3 --[0-9]+, other--> v_4

Keywords:

"je"

→ v_0 --j--> v_1 --e--> v_2 --other--> v_3
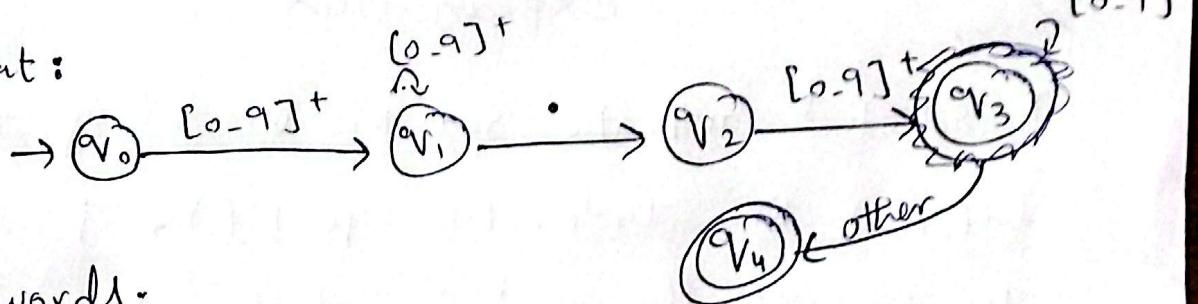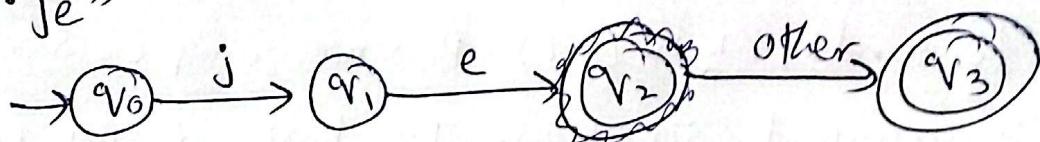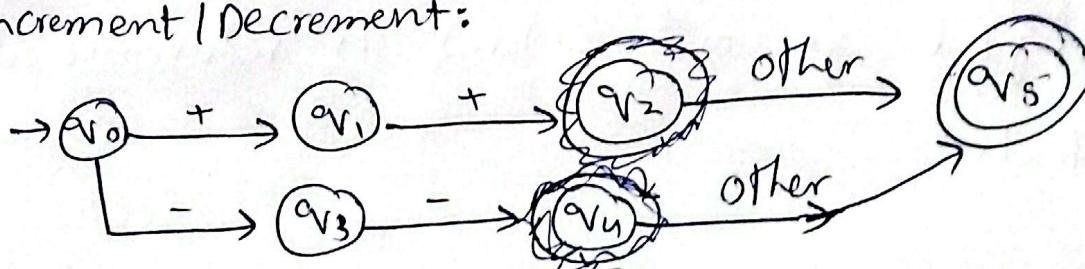
similar FAs for all keywords

Operators:

→ v_0 --[+|-|*|/|=]--> v_1 --other--> v_2

Increment/Decrement:

→ v_0 --+--> v_1 --+--> v_2 --other--> v_5
v_0 ---→ v_3 ---→ v_4 --other--> v_5

Delimiter:

→ v_0 --(--> v_1 --other--> v_5
v_0 --)--> v_2 --other--> v_5
v_0 --;--> v_3 --other--> v_5
v_0 --{--> v_4 --other--> v_5
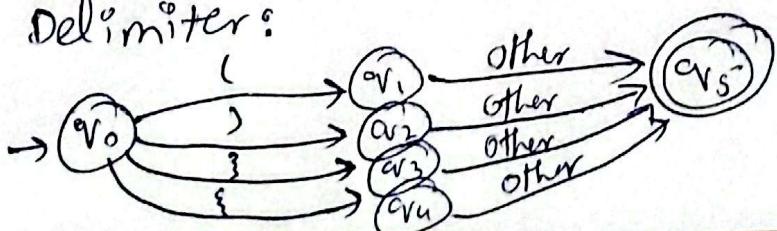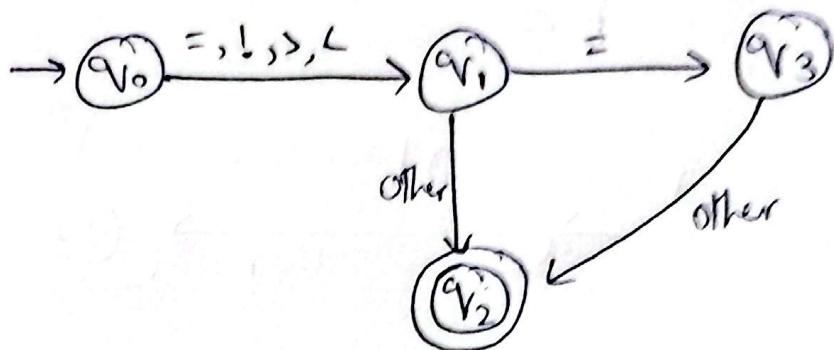
Relational operators:

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Explanation

I selected authentic Saraiki vocabulary that is different from Urdu. Like "je" (if), "jeintak" (while) etc. are naturally used in daily Saraiki conversation. "te" (and), "koh" (not) - Preserve unique Saraiki grammatical structures. To best of my knowledge, it will be first Saraiki programing language which gives voice to underrepresented regional language in technology. It brings Saraiki into digital age and ensures its relevance in tech.