

University of Central Punjab (UCP)

Academic Year: 2022–2026
Department: Computer Science
Project: Compiler Construction
Subject: CC
Section: "G-1"
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Roll No: 0436
Date of Submission: 09/11/2025

Phase 1 Deliverables Checklist:

- Regex definitions table
- Token types and examples for the language:

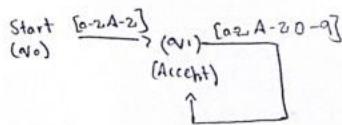
Token Type	Regular Expression	Examples
Identifier	[a-zA-Z_][a-zA-Z0-9_]*	
Keyword	strategy asset ...	
Integer	[0-9]+	
Float	[0-9]+.[0-9]{1,2}	
Operator	=, >, <, *, +	
Punctuation	;, (,), {, }, "	
String	"[^"]*"	

- *Explanation:* Every row describes a valid token in language, including its regular expression and usage examples. This table helps explain how the lexer recognizes each token class.

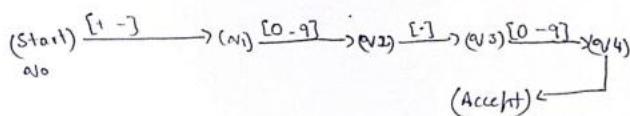
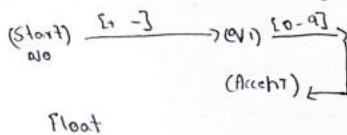
Finite Automata Diagrams: (Draw by hand)

Finite Automata (FA)

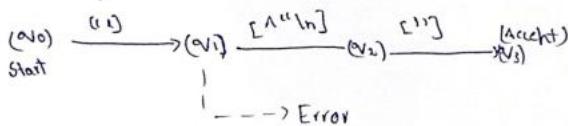
Identifier Recognition



Integer Number Recognition



String Literal



Keyword Specifications and Explanations:

A table of 15 keywords from Language, each explained for financial trading and programming logic:

Keyword	Meaning/Role	Explanation
Khamoshi	Control	main function — Program entry/start point.
Dekhlo	Conditional	if — Checks a condition.
Nahintoh	Conditional	else — Alternative branch.
Jab-tak	Loop	while — Repeat if condition true.
Saare-bache	Loop	for — Loop control, student list style.
Class-se-bahir	Flow	break — Exit a loop/block.
Chordo	Flow	continue — Skip rest, next loop step.
Jawab-do	Flow	return — Give back result/answer.
Kitne-number	Type	int — Integer value.

Percentoge	Type	float — Decimal number/C.GPA.
Naam-batao	Type	string — Text value like student name.
Kuch-nahin	Type	null — No value/absence.
hamesha	Modifier	const — Never change/final value.
Foil-he	Control	exit — Quit program.
Fail-ho	Status	fail — Used for errors/fail status.

GitHub repository requirements:

- Must contain:
 - Lex/scanner.l file
 - Your unique sample test program
 - tokens.txt output file
 - Sample execution video (max 5 min)
- GitHub https://github.com/ROCKYNWER/StrictPakistaniTeacherLang_cc_project