Documentation Of Compiler Project

Project Name (Scanner 2)

Member 1 (Team Leader) :-

Name : ***Youssef Medhat Galal***

Id : ***20180721***

Member 2 :-

Name : ***Mohamed Fathy Youssef***

Id : ***20180525***

Member 3 :-

Name : ***Mohamed Maher Fouad***

Id : ***20180527***

Member 4 :-

Name : ***Hasnaa Khaled Soliman***

Id : ***20180200***

Member 5 :-

Name : ***Afnan Talaat Sayed***

Id : ***20180120***

Regular Expressions :-

IDENTIFIER

RE = **Letter**(**Letter** | **Digit**)*

Constant

RE = **Digit**+

Arithmetic Operations

RE = **+** | **-** | ***** | **/**

Logic Operators

RE = **&&** | **||** | **~**

Relational Operators

RE = == | != | <= | >= | < | >

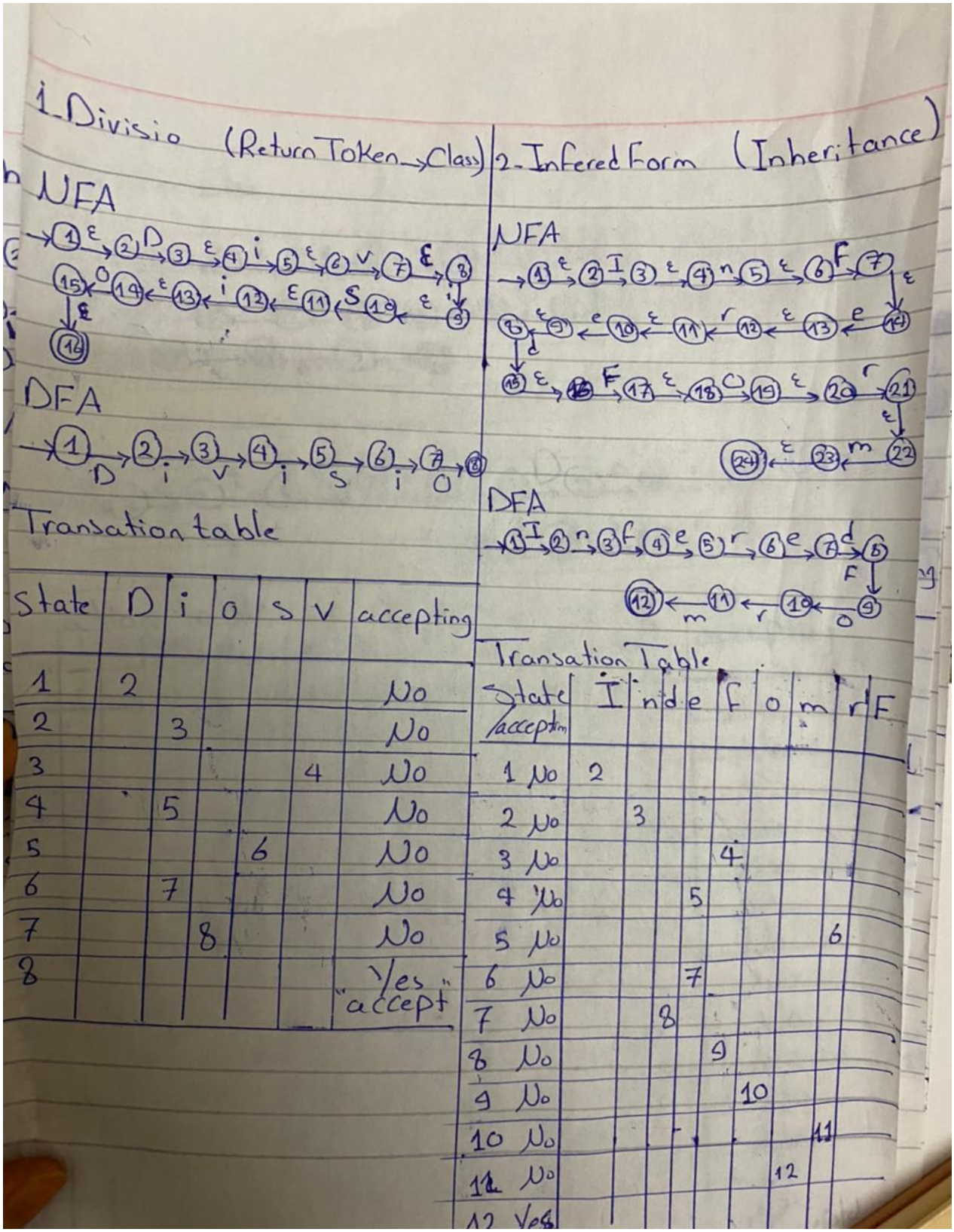
Or RE = (**!** | **=**)**=** | (**<** | **>**)=?

Comment

RE = **/** (**@**| **^**) | **@/**

RE = **/@ @/** | **/^**

NFA :-

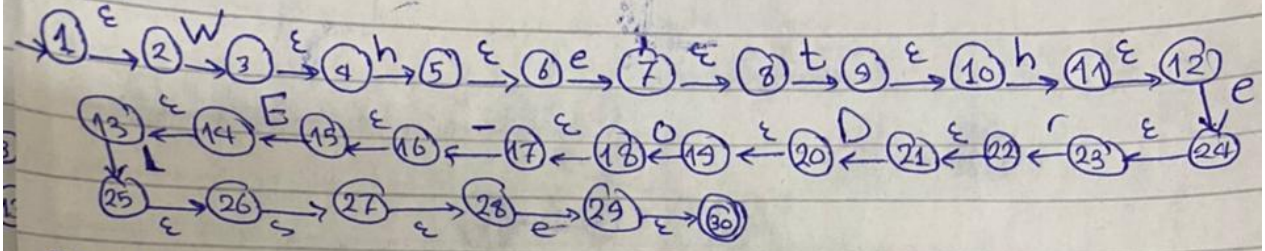


State	D	i	o	s	v	accepting
1	2					No
2		3				No
3					4	No
4		5				No
5			6			No
6		7				No
7			8			No
8						"Yes" "accept"

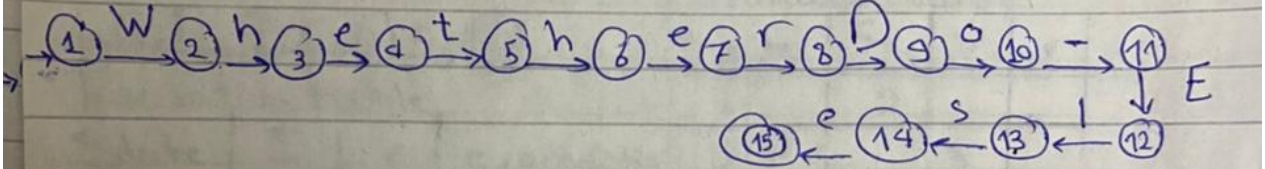
State / accepting	I	n	d	e	f	o	m	r	F
1 No	2								
2 No		3							
3 No					4				
4 No				5					
5 No							6		
6 No				7					
7 No			8						
8 No					9				
9 No						10			
10 No							11		
11 No						12			
12 Yes									

3- Whether Do-Else

NFA



DFA

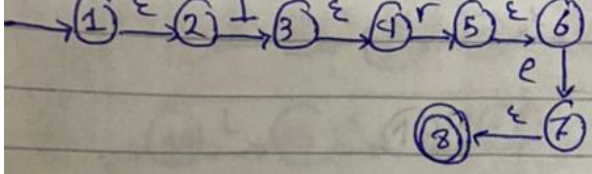


Transaction table

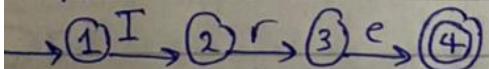
State	_	D	E	W	e	h	I	o	r	s	t	accepting
1				2								No
2						3						No
3					4							No
4					7						5	No
5						6						No
6					7							No
7									8			No
8		9										No
9								10				No
10	11											No
11		12										No
12							13					No
13										14		No
14				15								No
15												Yes accepted

4. Ire

NFA



DFA

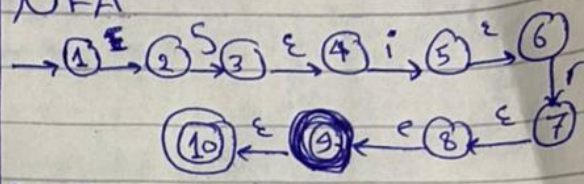


Transation table

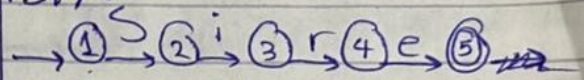
State	I	r	e	acceptin
1	2			No
2		3		No
3			4	No
4				accepted

5. Sire

NFA



DFA

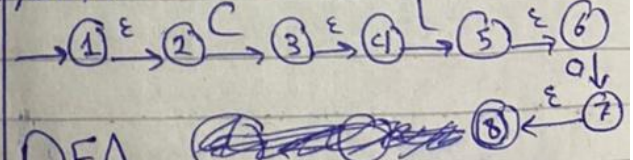


Transation table

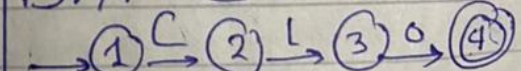
State	S	i	r	e	accepti
1	2				No
2		3			No
3			4		No
4				5	No
5					accep

6. Clo

NFA



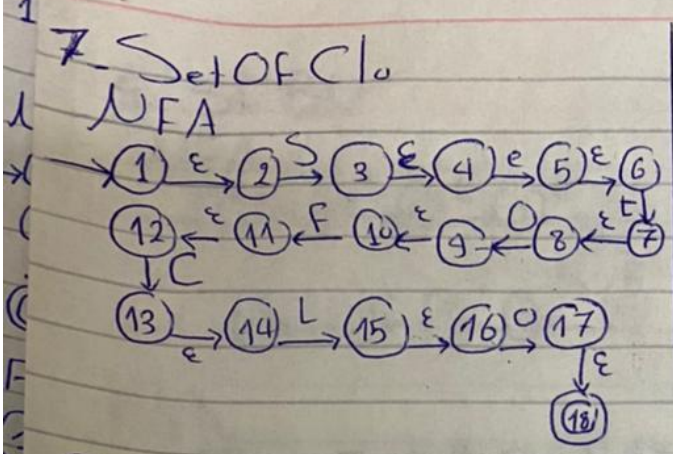
DFA



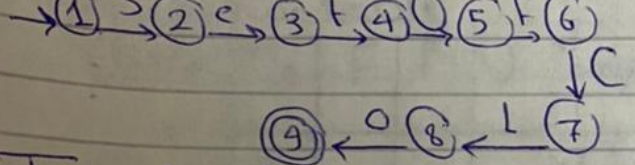
State	C	L	o	accepting
1	2			No
2		3		No
3			4	No
4				accepted

7- Set Of Clo

NFA



DFA

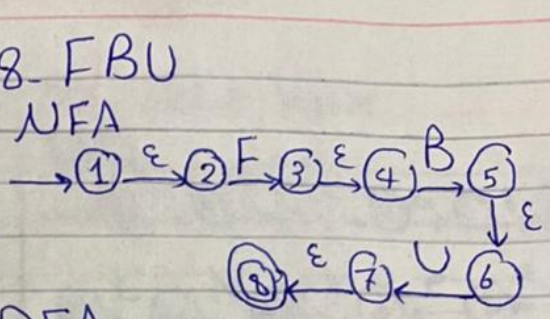


Transation table

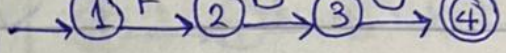
State	S	e	t	O	F	C	l	o
1	2							
2		3						
3			4					
4				5				
5					6			
6						7		
7							8	
8								9
9 accepted								

8- FBU

NFA

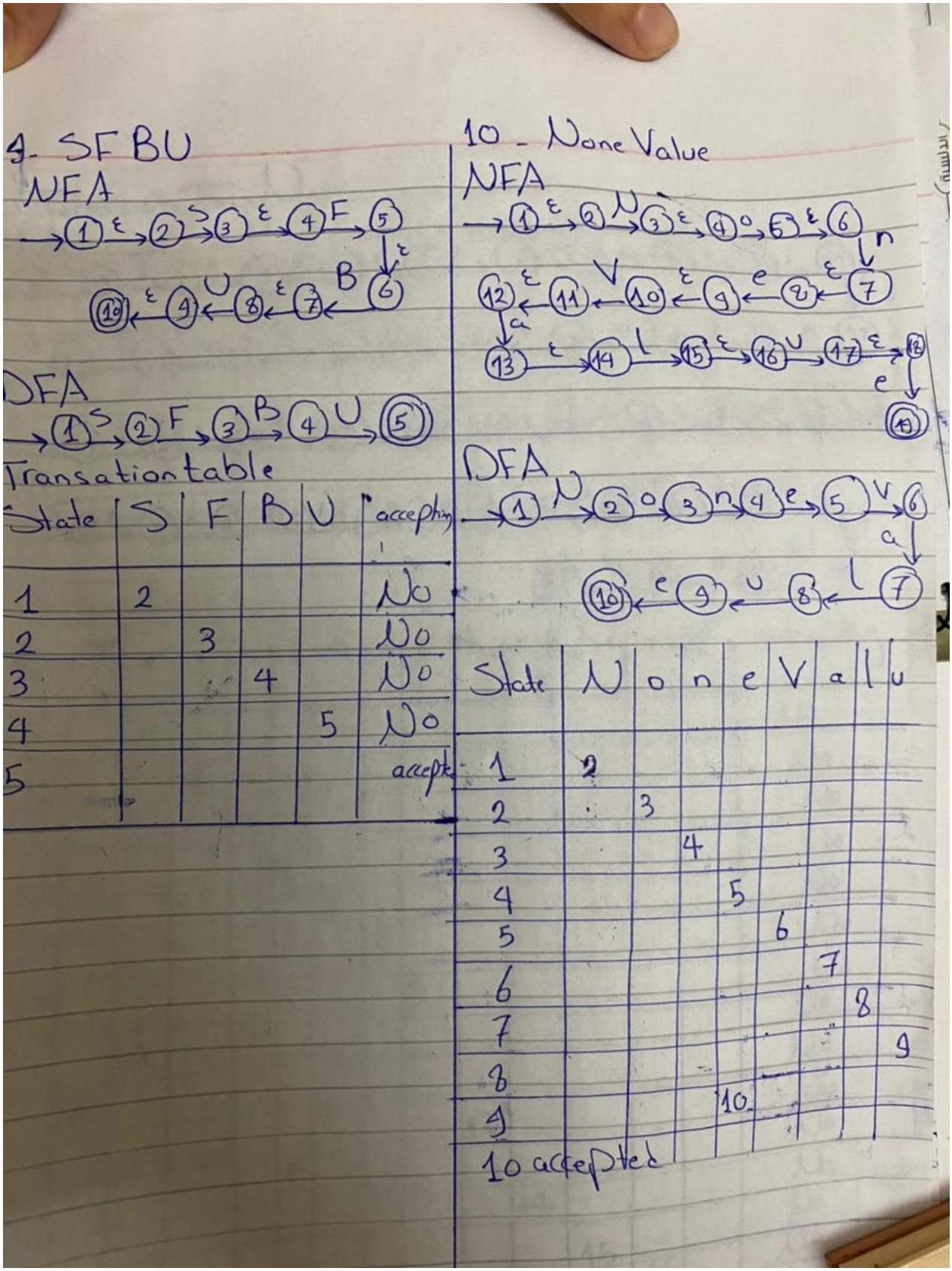


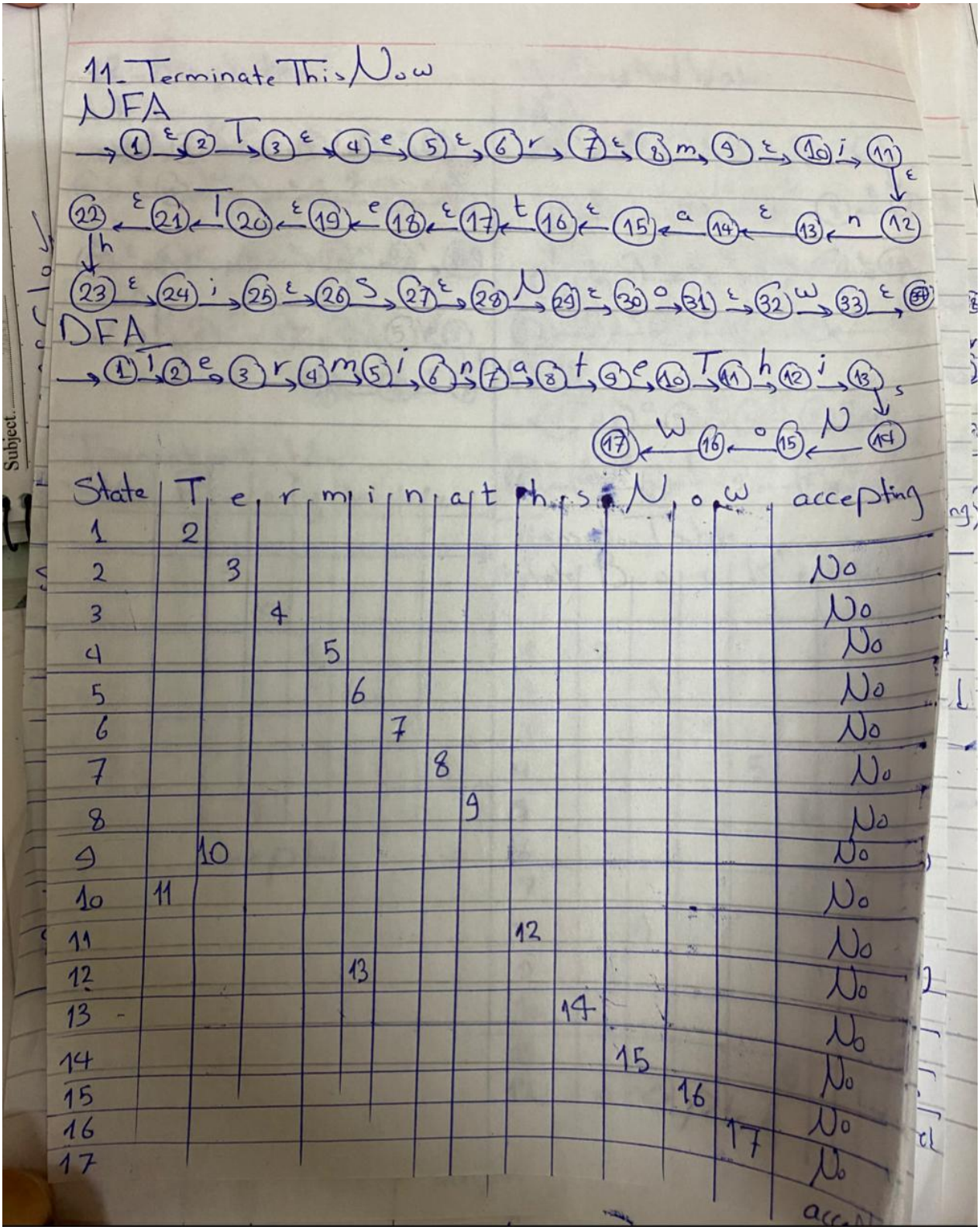
DFA



Transation table

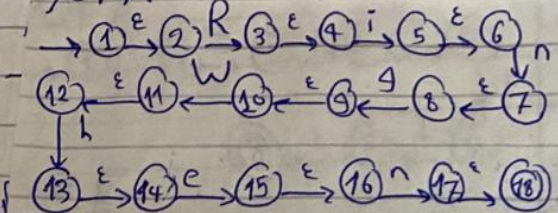
State	F	B	U	acceptio
1	2			No
2		3		No
3			4	No
4				accepted


9. SFBU
NFA
DFA
Transation table
State | S | F | B | U | accepting
1 | 2 | | | | No
2 | | 3 | | | No
3 | | | 4 | | No
4 | | | | 5 | No
5 | | | | | accepted
10 - None Value
NFA
DFA
State | N | o | n | e | V | a | l | u
1 | 2
2 | 3
3 | 4
4 | 5
5 | 6
6 | 7
7 | 8
8 | 9
9 | 10
10 accepted

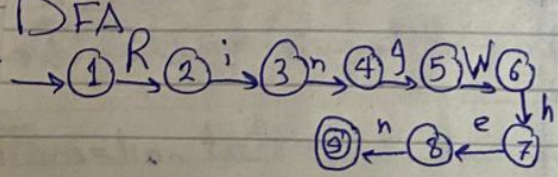

11. Terminate This Now
NFA
DFA
State | T | e | r | m | i | n | a | t | h | s | N | o | w | accepting

12 - RingWhen

NFA



DFA

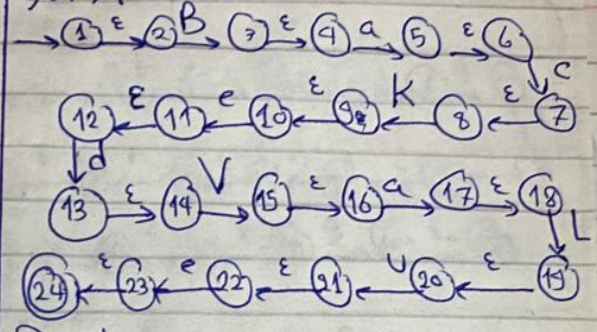


Transation table

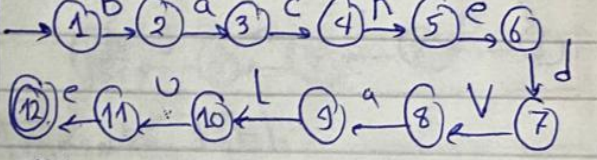
State	R	i	n	g	W	h	e
1	2						
2		3					
3			4				
4				5			
5					6		
6						7	
7							8
8			9				
9	accepted						

13 - BackedValue

NFA

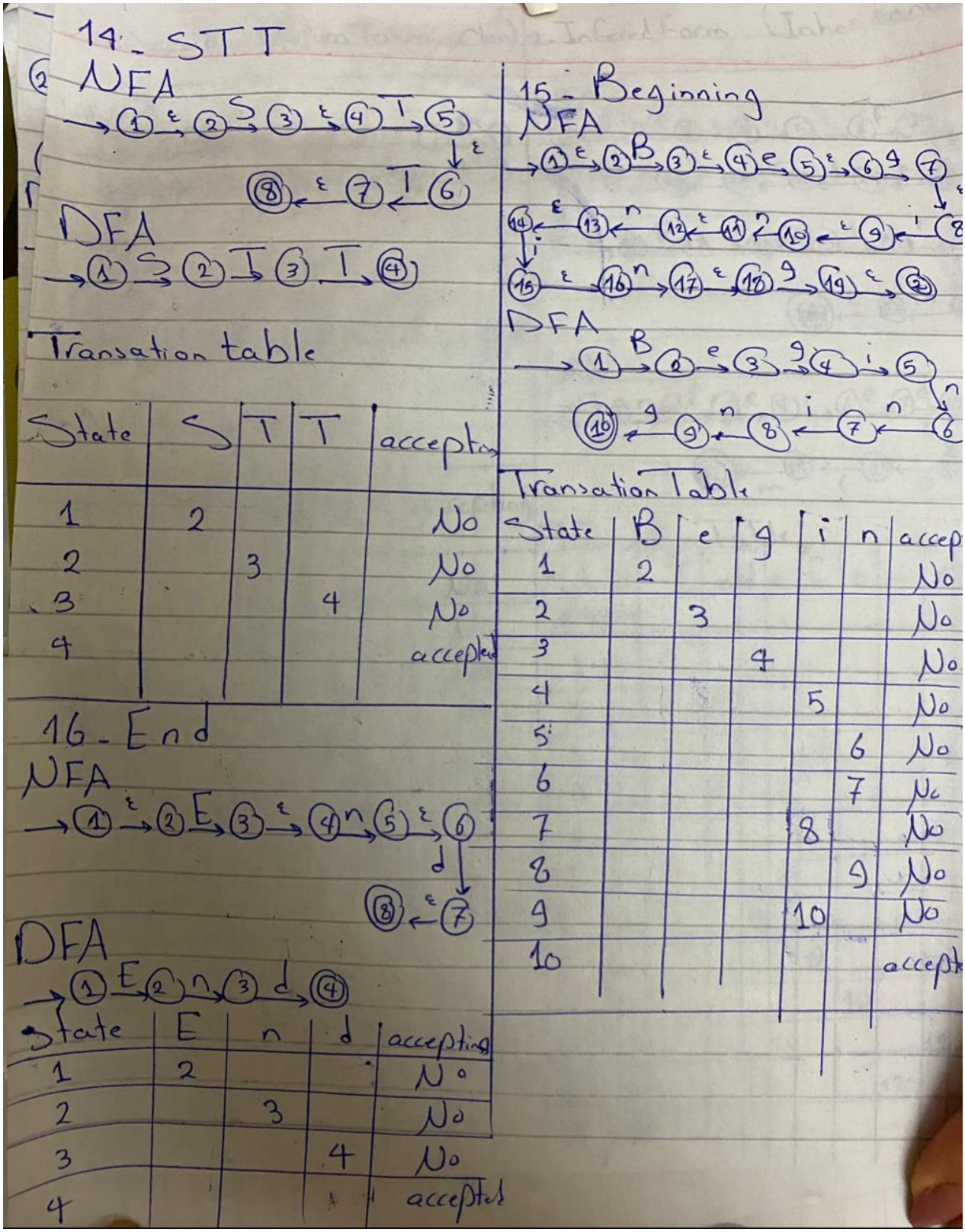


DFA

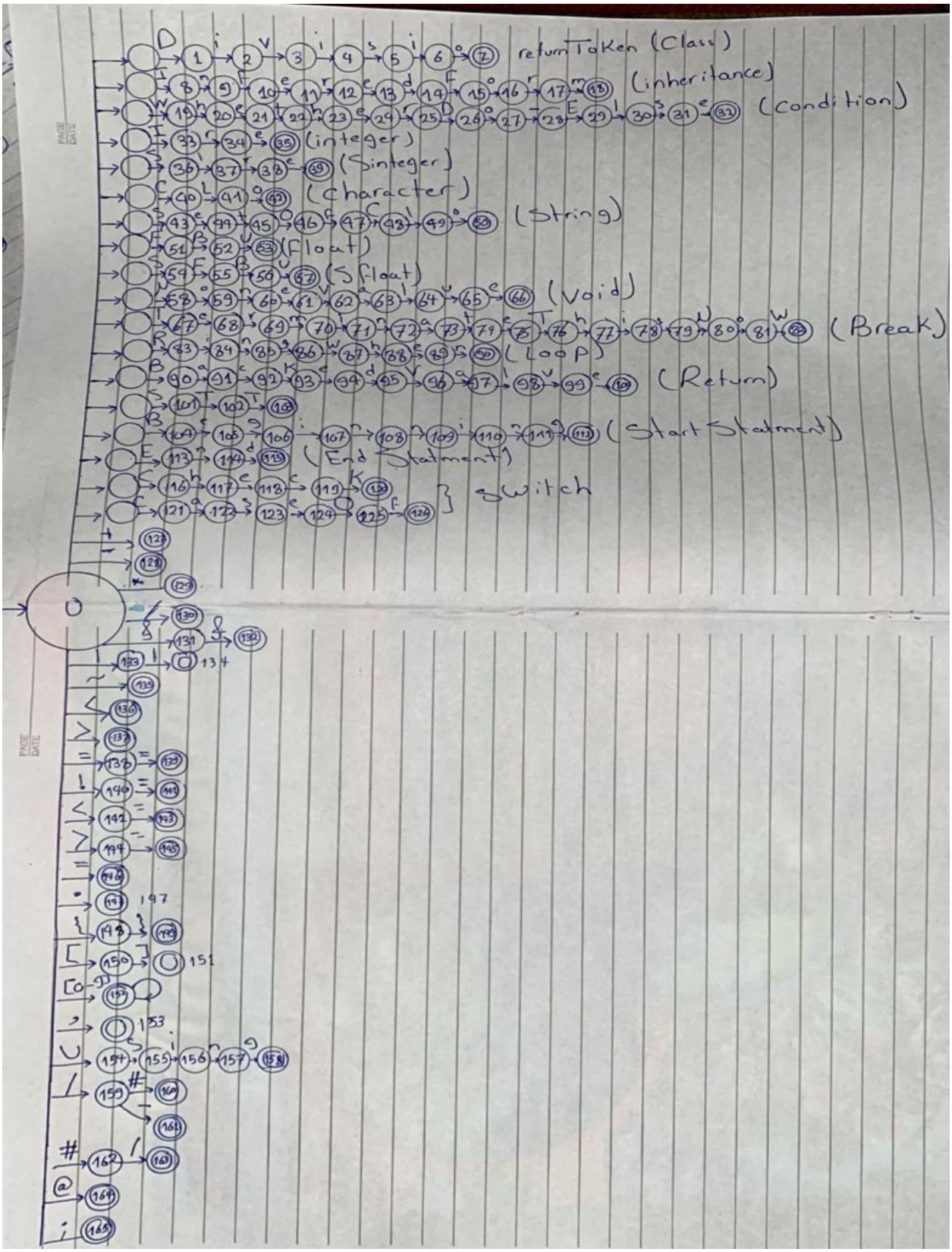


Transation Table

State	B	a	c	K	e	d	V	L	U
1	2								
2		3							
3			4						
4				5					
5					6				
6						7			
7							8		
8		9							
9								10	
10									11
11					12				
12	accepted								


14. STT
NFA
DFA
Transation table
State | S | T | T | accepting
1 | 2 | | | No
2 | | 3 | | No
3 | | | 4 | No
4 | | | | accepted
15. Beginning
NFA
DFA
Transation Table
State | B | e | g | i | n | accep
1 | 2 | | | | | No
2 | | 3 | | | | No
3 | | | 4 | | | No
4 | | | | 5 | | No
5 | | | | | 6 | No
6 | | | | | 7 | No
7 | | | | 8 | | No
8 | | | | | 9 | No
9 | | | | 10 | | No
10 | | | | | | accept
16. End
NFA
DFA
State | E | n | d | accepting
1 | 2 | | | No
2 | | 3 | | No
3 | | | 4 | No
4 | | | | accepted

DFA :-


return Token (Class)
(inheritance)
(condition)
(integer)
(Sinteger)
(character)
(String)
(Float)
(Sfloat)
(Void)
(Break)
(Loop)
(Return)
(Start Statment)
(End Statment)
switch