Q3) Write a short note on operator precedence parser. -> An operator precedence passer is a type of shift-reduce
passer used in compiler design for syntax analysis. It is based on the precedence of passo operators in the input language. The passer uses a stack to keep track of operators and operands, and a set of passing rules to construct an abstract syntax tree from the input string. -> The passing algorithm works by reading the input string from left to right and pushing operators and operands onto the stack based on their precedence. When a lowerprecedence operator is encountered, the passer reduces the stack by applying the appropriate passing rule. -> The main advantage of operator precedence passer is its simplicity and efficiency. It can handle a wide range of programming languages, including those with complex operator precedence rules. However, it has some limitations, such as the inability to handle left-recursive grammars and some forms of ambiguity in the input language. -> Operator precedence parser is an important technique in compiler design that allows efficient and accurate syntan analysis of programming languages, Advantages O Fast 3 Easy to understand and implement (4) Can be used to parse complex expressions undequations

	Disadvantages took of the	i
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(74)	Write short note on shift reduce passes,	
Any.	-> Shift reduce parser is a bottom up parser,	
	it was bottom up passing for constructing the purge	
	tree of an input string.	
	1 - who 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1	
	-The passer initially shifts the input symbols buto a	
	stack, then reduces the stack by applying production oules until start symbol is reached.	
) ,	oules until start symbol is reached.	
	/ its	
	-> shift reduce pursues uses shift operation to more	-
1	input symbols on the top of stack with a non-	
1+1	terminal symbol. The parser determines whether to shift	
3 r i	or reduce based on the next input combal and	
	top of stack.	
	4	
	antigous grammar, which others parsers may struggle with.	
	ambigous grammar which others and	
	with,	e
	-> It has some disaderente :1	
	-> It has some disadvantages, it can be difficult to construct grammar which is suitable for shift-	- CHARLES
	reduce comes which is suitable for shift-	
	passes.	
	and shift-reduce conflicts, which must be resolved to produce a correct passe tree	
	and shift the prone to reduce - reduce	
	to produce conflicts, which must be resolved	
	to produce a correct passe tree	
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		Example		
	Consider the go	vmnax		_
	0.0	5->(L)   a		_
		->L,S S		_
				_
	"(a,(a,a))	reduce parsing for in	out string	_
				_
	Stack	Action Input	Action	_
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	\$(	a, (a,a))\$	Shift	
	\$(a	, (a,a))\$	Reduce 5-7a	
4	\$(5	, (a,a))\$	Reduce L->5	
1	\$(L	(a, a))\$	shift	
$\parallel$	\$(L,	(a, a)) \$	Shift	
_	\$(L, C	a,a))\$	Shift	
	\$( L, Ca	,a))\$	Reduce 5->a	
$\parallel$	\$ (L, (s	,a)) \$	Reduce L->S	
	\$ (L, (L	(a))\$	Shift	
	\$(4,(4,	a)) \$	Shift	
	\$( L, (L, a	5)4	Reduce 570	
	\$(L,(L,S	))	Reduce L->L,S	
	\$ ( L, ( L		Shift	
	\$ ( L, ( L)	<u> </u>	Reduce S->(L)	
1	\$ ( -15	)\$	Reduce L->L,S	
#	\$ (L	)\$	Shift	_
#	\$ (4)	\$	Reduce S-7(L)	_
	5.5	\$	Accept	
-				