Jim & space complication

BFS:

(3+v)0 = phiralymas mic€

v= westices

E= edges

we will such moder once which takes const time

T(v) = (x v = o(v)

we implore edges directed as d(v)

T(E) = E[a(V)] + v EV = 2* (4)

June complexity => T(n) = T(V) + T(E) = 0 |V| + 0 |E)

= 0[14 + 181]

-> space Complicity

S(n) = spo a complinity

queue: In worst case queue can contain all the vertices at last livel . So,

S(N) = 0/V1

=> Transval Kethod: level by level, writing all neighbours at evocunt depth, moves to nent level

- data structure: quere

→ 0 (v+E) y adjacency dist

→ 0 (v²) if 1' matrix

		6
4		6
	Stoan Cora pla : Cad cai nou'd'il cit man disci	1
	making O(U4 E) purform well	No The last
	macay (cr. 2) page and a	6
	(3+V)O = WINDINGO STILL	%
	=> lense frager ' her is an aption but leads to O(v2)	W 1
	=> us yficins	
+una.	supply which was a made and which take	2
	D with	2
-	Depth First Scarcin (DFS)	2
	· Oranjurial Method : who was to mary me on	
	Emplores a graph by travering as dup as	-
10	It can go before it hits a dead and. Thun backeracks	8
1	to the hearest node with a neighbour and repeats	-
13/0+	Hothe (process) T = (n) T & july fine with	*
	[] st + Tut] o =	-
	Time: O(v+E) y adj. list	a
	Star Complimity	0
	1 pau: o(v) du to edi lie stours nodes	4
	in stack and visited array	
4 Klary	on meating the state of the sound of the	0
	=> sata structuri. Statk for managing visited modes	
		0
	=> Eparse Graph: E<< 12 O(V+E) is largely dominated	1
	By O(v) as & is comparatively small	0
	Frankled Killyad: Buil by (Bill, William)	0
lou	- dense graph: O(UTE) complexity approaches	0
	0 (V2) as & bicomes the abminant factor of edg.	
	matrin is used for supresentation	0
		4
	subjusted to (8+4) of (8+4)	9
	stution " b (4)0 601	- C)
		0