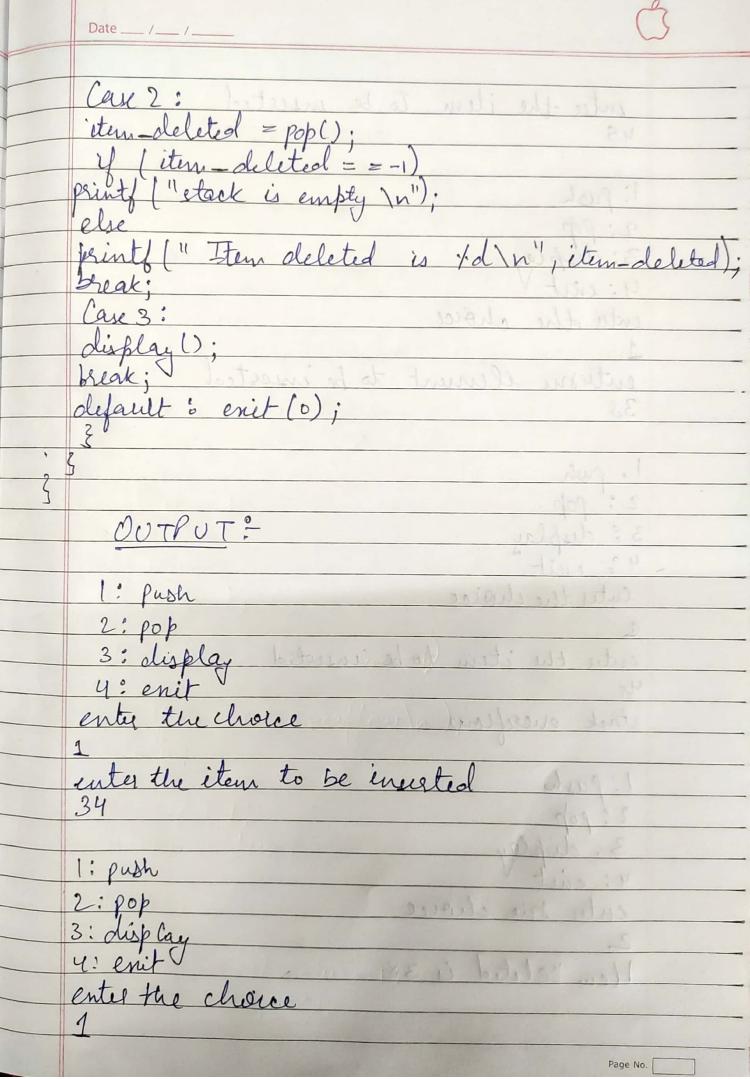
Date ___ / ___ / Lab Program 1 Write a program to simulate the working of stack using an array with the following (a) Push b) Pop c) diplay The program should print appropriate musages for stack overflow and stack underflow. # include (etdio, h) # include (stalleb. h) # define stack-size 3 int 5 [3]; int item; uoid push () ? if (top= = stack_size -1) print ("stack overflow \n"); tof= top+1: S[top]= item; sut pop () y (top = = -1) heturn-1; return S[top --];

-	
	Void dyplay ()
	3
	wint it delivered of my parago
nus.	int i ; $i\int_{5}^{2} (top z = -1)$
	05 (2)
	esint(1" ctack is empty \n);
	grint/ ("ctack is empty 'n"); setush;
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 3 dividando deira blundo metera
	Rejust 1 "contents of the stack 'h");
	los lizo; i <z ;="" i+t)<="" th="" top=""></z>
	Print ("contents of the stack 'h"); for (i = 0; i <= top; i++)
	print ("1.d \n', s[i]);
	2. Labore starte ours
	3
	Void main ()
	int item-deleted; int choice; fol (ij)
	int choice:
	[] [] [] [] [] [] [] [] [] []
	1
	print ("\n1: push\n2: pop\n3: display in
	1 display in
	Drintl (" enter to al as a ");
	Print ("enter the choice n"); Seant ("1.d" & choice); Switch (choice)
	Suitah (ahora)
	S (Cace)
	Case 1:
	seint Ina to 10. it
	(and I) !! (clem to be inscrited n").
	printf ("enter the item to be inserted n"); searf ("./.d", & item);
	breck;



	Date / /
	Date / /
	the inserted
	enter the item to
	enter the item to be inserted 45
	(1-= - 123) Slatte (1 1 1 thing)
	1: push
71	2: pop
That.u.	3: disp Cay
	y: ent
	enty the choice
	1
	entrone element to be inserted
	38
	1; push
	2: pop
	3: duplay 4: enit
	enty the choice
	1
	enter the item to be inserted
	o dino : D
	stack overflow
	lifush de
	2. 100
	3: display 4: enet
	4: enet
	exter the choice
	2
	11 Nolflins
	Hem Deleted is 38
	DAME AND DATE OF THE PARTY OF T

Date / /	
1: push	
2º pop	
3 å display	
2º Pop 3º disflay 4: enit	
enty the choice	
3	
content of rustack	
34	
35	
1: push	
2:pop	
3: display	
3: display 4: exit	
isites the choice	
4	

De Write a C program to dismulate the workens
of stack using array by passing array in the
push, pop and display. # include <stdio. h> # include < stallib, h) # clefine stack-Size 3

Int top = -1;

void push (int item, int s []) if (top = = stack size - i) Printl (" stack overflow \n"); top = top + 1; S[top] = item; int pop (int SCI) frints ("stack underflow \n"); seturn-1; & return S[top--]; Void display (int CCJ) intij

```
Date __ /__ /___
il (top = = -1)
Printy (" stack is empty \n");
Setion;
printf ( "contents of the stack in");
fol (i = 0; i < ztop; i++)
Void main ()
 int s [3], iten;
int item_deleted;
int choice;
frints ("\n1: push\n2: pop\n3: displa,\n
y: exist\n");

Prints ("enter the choice of n");

Scary ("'.d", & choice);
rint (" enter the item to be inserted n");
Searf ("1.d", & item);
Push (item, s);
 iten - deleted = pop(s);
```

