	Lab Program	Code for push, pop and peck in a stack
		the late of the la
33	Write a program to simulate the working	· # state to # indelude (state h)
	of stack using on array with the	(mali, hV) thing
	Write a program to simulate the working of stack using on array with the following	1111
		int N=5;
a)	Push	int stack [N];
	mai many dark state of	int top=-1; (1x any biny tang t
6)	Pop	11 112
		> void push()
c)	Display	ž
	The state of the s	printf("Enter data");
	The program should print appropriate	scont (1.d , 4.26);
	muscages for stack overflow and	sconf (" 1.d", & 2c); if (top == (N-1))
	The program should print appropriate missages for stack overflow and stack underflow	7
	STATE OTTOM	printf ("Overflow")
		3
		else
		top+t;
		top++; stark [top]=x;
		3 (todaget) 45
		3
		"I trade plant I dang
		7 void pop()
		. 1 1
Harris I		if (top==-1)
NAME OF TAXABLE PARTY.		if (top==-1)
		printf ("Underflow);
		printf ("Underflow");
		else
Maria Carlo		

(Date)	
Lede to push pap and pack in 3 along	vaid main() trigitud
item = stack[top]; top; printf("%d", item);	
top , they shall be it down that	int choice;
printf ("%d", item);	do 9
	printf("\n Stack Menu \n");
> peak void peek()	printf("I. Push In"):
Stark INJ	print f ("2 Pop \n"); print f ("3 Peck \n");
+ prok void peck()	print + ("3, teck in),
3	printfl"4. Display Ini); printf("5. Enit")
if (top == -1) () day piov :	printf("Enteryour choice: ");
3	f("xd" schoice)
print f 6 Under flow 1/2	sconf (" y. d", & choice);
1 (See by) land	could be (chaice)
else ((I-11) = not) ti	S Tables and that
else (17-14)	seed to push (); break 1
print("Yd", stack[top]); 3	switch (choice) E cose 1: push(); break;
3	cose 2: pop(); break;
3 323	
3	cose 3: peck(); break;
if (top == -1)	· Printering start
7 void display	cose 4: display(1; break)
3	
if (top===1	case 5: excition
{ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	printf ("Eniting programi in");
printf ("Empty Stack"); 3	cose 5: excition printf ("Eniting programity"); briak; default: default:
3	default:
also	printf ("Invalid Input In 1;
\$ 1121	default: printf ("Invalid Input "n"); 3 while (Choice 1=5);
else intii (1-==qot)?ii	Line Oi
int i; for (i=0; i<5; i+1) { // / / / / / / / stack[i] / / / / / / / / / / / / / / / / / / /	return 0; grands may old.
tor (1 - U1) Thing	
2 stacklist	
printf ("Y.d\n", stack[i])	
71	

Stack Menu	ede (a)	· Enter your choice :4
1. Push 2. Pop 3. Peck 4. Display 5. Enit	306	
2. Pop	111	5 4
3. Peck	NIX S	\$ 4 ¥ 3
4. Display	dwire	3 3
5. Enit	fraing	3 1
Enter your choice: 1 Enter Data 1	Hara	10
Enter Data 1	Maria	10/15
("Fater your choice ")	tring	39 9/15
Enter your choice: 1	Tant	
Enter Data 2		20
(randa)	Salisa	
Enter your choice: 1 Enter Data 3	3	
Enter Data 3	10300	
Enter your choice: 1	L alei	
Enter Data 4		
I pushed; busking I	8-1202	
Enter Data 5	P .505	
Enter Data 3		
	. J 1103	
Enter your choice 1		
Entir Data 6	4	
Overflow	19	
	Iyakan	
· Enter your choice 3	14	
· Enter your choice 3	1 ideal	
3	O milu	
· Enter your choice 2		
5		

```
--- Stack Menu ---
1. Push
2. Pop
3. Peek (Top Element)
4. Display Stack
5. Exit
Enter your choice: 2
Underflow
--- Stack Menu ---
1. Push
2. Pop
3. Peek (Top Element)
4. Display Stack
5. Exit
Enter your choice: 1
Enter Data 1
                                                                                                                                                                                                                                                                                                                                                                                                  1. Push
2. Pop
3. Peek (Top Element)
4. Display Stack
5. Exit
Enter your choice: 3
                                                                                                                                                                                                                                                                                                                                                                                                  5
... Stack Menu ---
1. Push
2. Pop
3. Peek (Top Element)
4. Display Stack
5. Exit
                                                                                                                                                                                                                                                                                                                                                                                                  5. Exit
Enter your choice: 2
                                                                                                                                                                                                                                                                                                                                                                                                 5
--- Stack Menu ---
1. Push
2. Pop
3. Peek (Top Element)
4. Display Stack
6. Evit
--- Stack Menu ---
1. Push
2. Pop
3. Peek (Top Element)
4. Display Stack
5. Exit
Enter your choice: 1
Enter Data 2
                                                                                                                                                                                                                                                                                                                                                                                                  5. Exit
Enter your choice: 4
--- Stack Menu ---
--- Stack Menu ---
1. Push
2. Pop
3. Peek (Top Element)
4. Display Stack
5. Exit
Enter your choice: 1
Enter Data 3
                                                                                                                                                                                                                                                                                                                                                                                                 --- Stack Menu ---
1. Push
2. Pop
3. Peek (Top Element)
4. Display Stack
5. Exit
enter your choice: S
Exiting program.
--- Stack Menu ---
1. Push
2. Pop
3. Peek (Top Element)
4. Display Stack
5. Exit
Enter your choice: 1
Enter Data 4
                                                                                                                                                                                                                                                                                                                                                                                                  Process returned 0 (0x0) \, execution time : 233.296 s Press any key to continue.
--- Stack Menu ---
1. Push
2. Pop
3. Peek (Top Element)
4. Display Stack
5. Exit
Enter your choice: 1
Enter Data 5
--- Stack Menu ---
1. Push
2. Pop
3. Peek (Top Element)
4. Display Stack
5. Exit
Enter your choice: 1
Enter Data 6
Overflow
```