GAYATHRI

4AL19CS035

Algorithm

Step1: Start

Step2: void push(void)

Step3: void pop(void)

Step4: void display(void)

Step5: top = -1

Step6: Display Enter the size of Stack[max=100]:
Input n

Step7: Display Stack operation using Array

Step 8: Display 1-push 2-POP 3-DISPLAY 4-EXIT

Step 9: do
{
Display Enter the choice
Input choice
Switch(choice)
case 1: push()
break
case 2: POP()
break
case 3: display()
break
case 4: EXIT POINT
break
default: Display please Enter a valid
choice(1/2/3/4)

while(choice != 4)
return 0

Step10: Stop

void push()

Step 1 : Entry

Step 2 : if (top >= n-1)

Display Stack is over flow

Else

Display Enter a value to be pushed

Input x

top++

Stack[top] = x

Step 3 : End

void pop()

Step 1 : Entry

Step 2 : if (top <= -1)

Display Stack is under flow

Else

Display The popped Elements is

output Stack[top]

top--

Step 3 : End

void display()

Step 1 : Entry

Step 2 : if (top >= 0)

Display The Elements in stack

for (i = top; i >= 0; i--)

Display Stack[i]

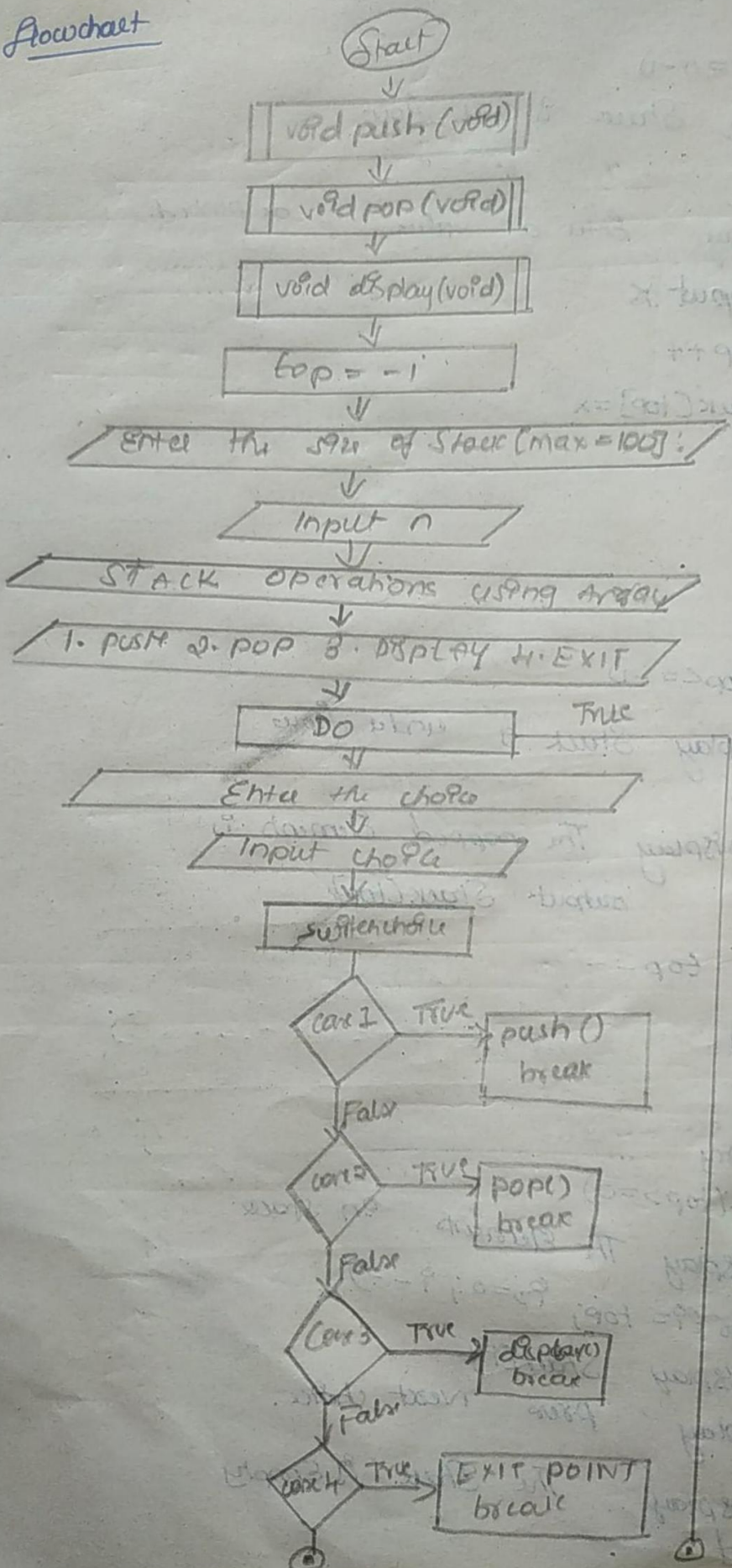
Display press next choice.

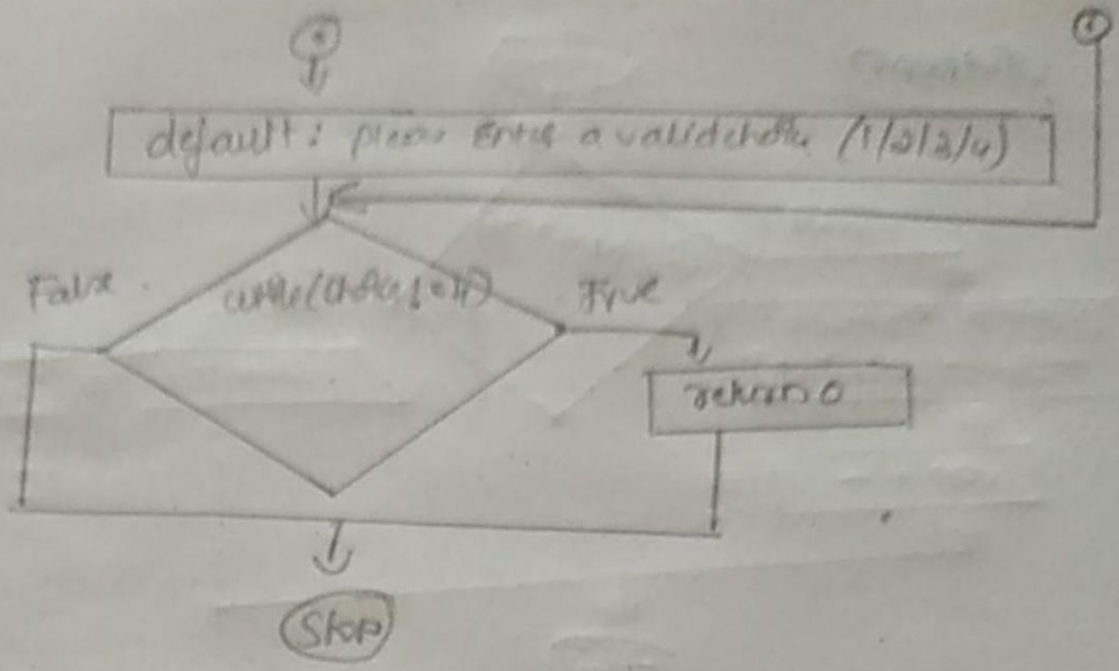
Else

Display The Stack is Empty

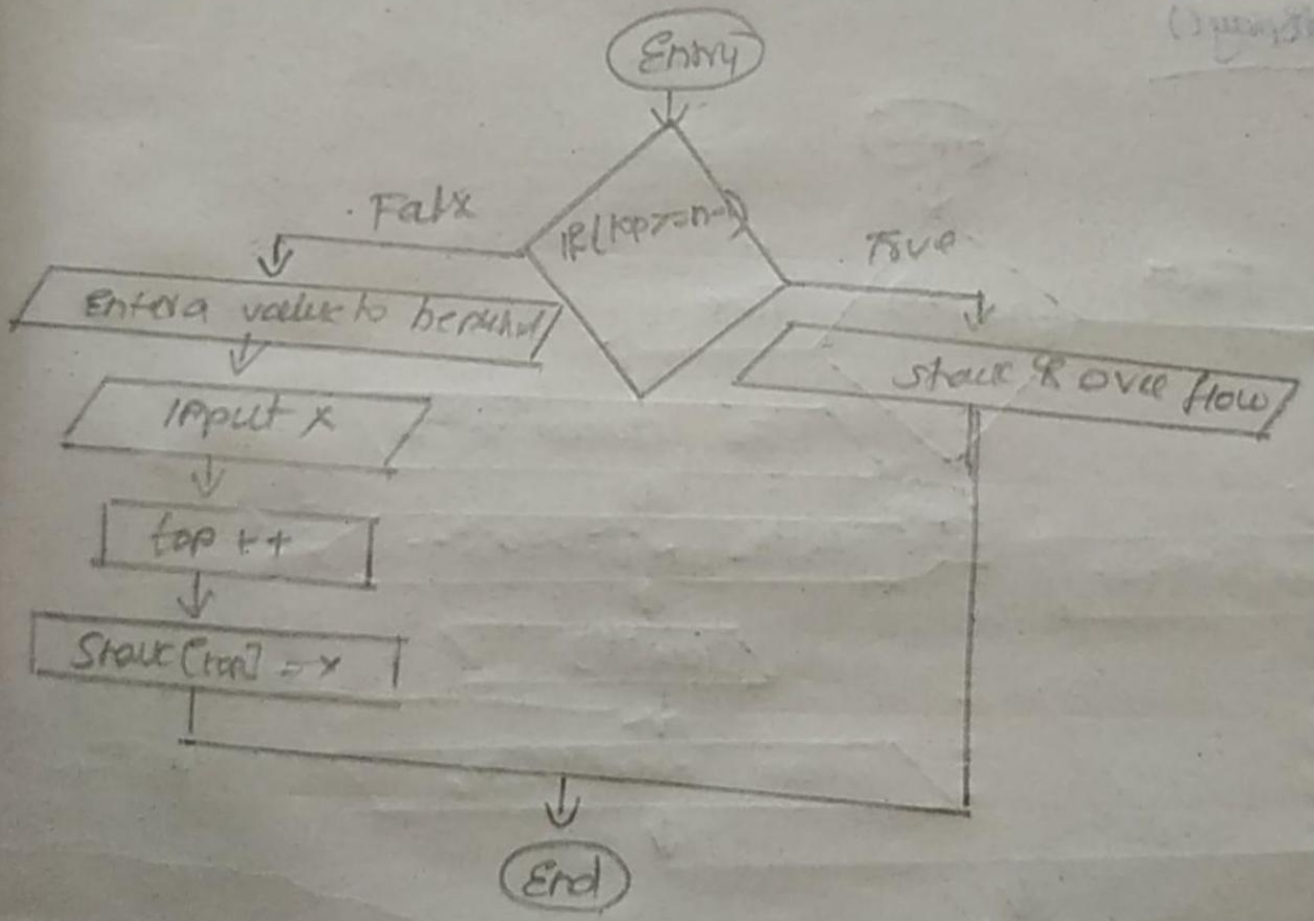
Step 3 : End

Flowchart

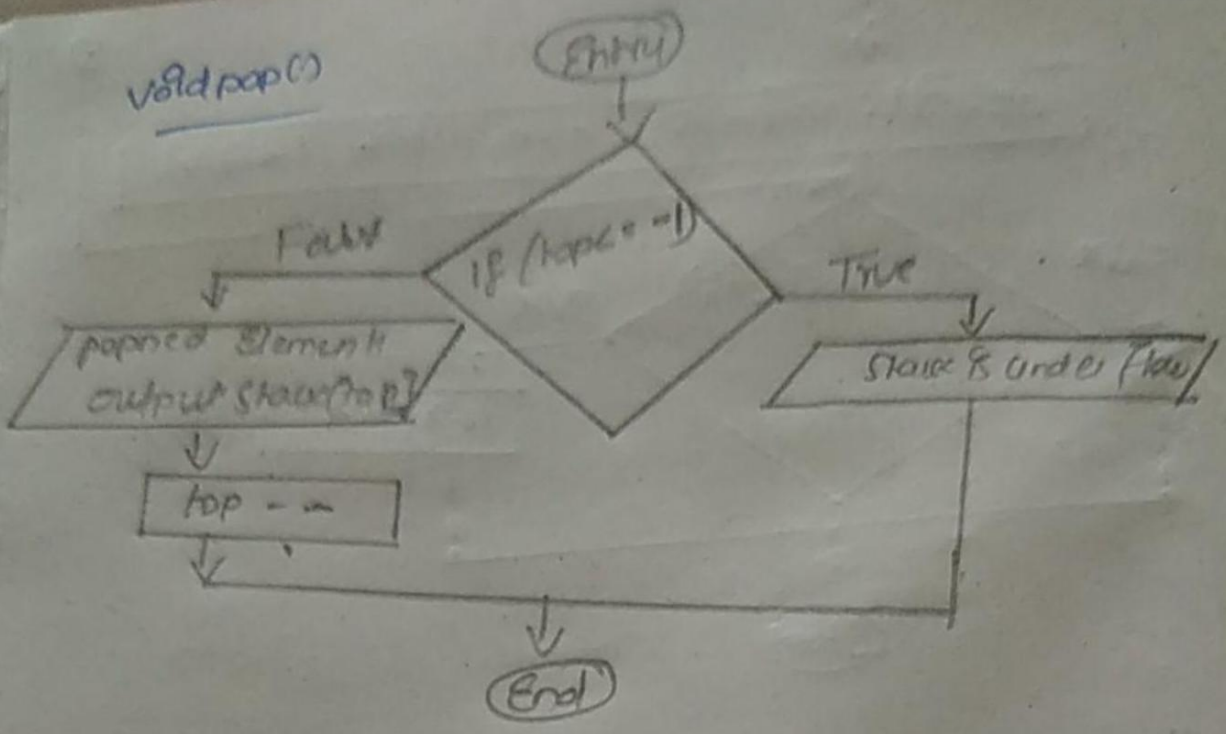

Start
void push (void)
void pop (void)
void display (void)
top = -1
Enter the size of Stack (max = 100):
Input n
STACK operations using Array
1. PUSH 2. POP 3. DISPLAY 4. EXIT
DO
True
Enter the choice
Input choice
switch choice
case 1
True
push()
break
False
case 2
True
pop()
break
False
case 3
True
display()
break
False
case 4
True
EXIT POINT
break


default : please Enter a valid choice (1/2/3/4)
False
while(choice!=4)
True
return 0
Stop

void push ()


Entry
False
if(top>=n-1)
True
Enter a value to be pushed
Input x
top++
Stack[top] = x
Stack is over flow
End

void pop()



void display()