AVIRATH HEGDE
1BM19CS195

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DS LAB

Q. WAP to simulate the working of stack using an array with the following:

a) Push
b) Pop
c) Display

The Prog. should print appropriate messages for stack overflow, stack underflow.

```
#define SI
#include <stdio.h>
#include <conio.h>
#define SIZE 10

void Push(int)
void pop ();
void display();

int stack[SIZE], top=-1;

void main()
{
  . . . .
}

void Push(int val)
 {
  if (top == SIZE-1)
      printf("\n Stack is full");
  else
```

```
{
top++ ;
stack[top] = value ;
printf("\n Insertion Success!");
}
}
void pop() {
if (top == -1)
    printf("\n Stack is empty");
else
{
    printf("\n Deleted : %d" stack[top]);
    top--;
}
}

void display() {
{
    if(top == -1)
    printf("\n Stack is Empty");
else
{
    int i;
    printf("\n Stack elements are :\n");
    for(i = top ; i >= 0 ; i--)
    printf("%d\n", stack[i]);
}
}
```