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IBM19CS006

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Write a program to simulate the working of stack using array with the following:

a) Push

c) Display

b) Pop

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

```
void display(int []);  
void push(int [], int);  
int pop(int []);
```

```
int pop(int stack[]).
```

```
int pop_ele;  
if (top == -1)  
printf
```

```
void push(int stack[], int ele)  
{
```

```
    if (top == size - 1)  
        printf("Stack overflow");
```

```
    else  
    {  
        top ++;
```

```
        stack[top] = ele;
```

```
    }
```

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```
void  
int pop(int stack[])
```

```
{  
    int pop;
```

```
    if (top == -1)
```

```
        printf("Stack underflow");
```

```
    else
```

```
        pop = stack[top];
```

```
        top --;
```

```
    }  
    return pop;  
}
```

```
void display(int stack[])
```

```
{  
    int i;
```

```
    printf("The stack is ");
```

```
    for (i = top; i <= 0; i++)
```

```
    printf("%d ", stack[i]);
```

```
    for (i = top; i <= 0; i--)
```

```
        printf("%d \n", stack[i]);  
}
```