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

(a) Push

(b) Pop

(c) Display.

The programme should print appropriate messages overflow, stack overflow.

Ans

Create a stack of size 10.

```
push(x)
```

```
{
```

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

```
{
```

```
printf("stack is full!");
```

```
}
```

```
else
```

```
{
```

```
top ++;
```

```
stack[top] = x;
```

```
}
```

```
}
```

```
pop()
```

```
{
```

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

```
{
```

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

```
}
```

```
else
```

```
{
```

```
printf("stack[top]");
```

```
top --;
```

```
}
```

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```
display ()  
{
```

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

```
        printf("Stack is empty");  
    }
```

```
    else
```

```
    { int i;
```

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

```
      {
```

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

```
      }
```

```
    }
```

```
}
```