Algorithm 1:

Algorithm for inserting an element into a stack

Step 1:[check for stack overflow]

If top=maxsize-1, then print overflow and exit

Step2:[increase top by 1]

Set top=top+1

Step 3:[insert item]

Set stack[top]=item

Step 4:Exit

Algorithm 2:

Algorithm for Deleting an element from stack

Step 1:[check for stack underflow]

If top<0, then print underflow and exit

Step2:[Assign element into item]

Item=stack[top]

Step 3:[delete element]

Set top=top-1

Step 4:Exit

Applications of stack

1. Reverse a string
2. Bracket balancing in compilers
3. Undo operations in many editors
4. Evaluation of Arithmetic operators