

## Practical no 5 : By Parth Gawad, Roll no 62

```
class StackDepth :
    def depth(str : str) -> int:
        max_dep, curr_dept = 0,0;
        for char in str :
            if char == '(' :
                curr_dept += 1;
                max_dep = max(curr_dept,max_dep);
            elif char == ')' :
                curr_dept -= 1;

        return max_dep;

stack = list(input("\n Enter the elements in stack : "));
print(stack);
s1 = StackDepth;
print("The depth of the '()' is : ");
print(s1.depth(stack));
```

Enter the elements in stack : (1+(2\*3)+((8)/4))+1

```
[ '(', '1', '+', '(', '2', '*', '3', ')', '+', '(', '(', '8', ')', '/',
'4', ')', ')', '+', '1' ]
The depth of the '()' is :
3
```