PW SKILLS

Stack

- LIFO (Last In First Out)
- FILO (First In Last Out)

1. Undo → ctrl + Z

2. Recursion → Recursive Tree

↓

Function call

↳ Stored by Stack Data Structure

Abstract Data Type :- Push() – inserting new data in the stack

Pop() – delete any data from the stack

top → to point the topmost element in the stack

$n = 7$

Push

top = ~~3~~ 4 → 5

top → 4


```
push(x){
  if(top == n-1){
    print("Stack Overflow");
  }
  else{
    top = top+1;
    arr[top] = x;
  }
}
```

new data

Time complexity = O(1)

Deletion of any Element

```
pop(){
  if(top == -1){
    print("Stack underflow")
  }
  else{
    x = arr[top];
    top = top-1;
  }
  return x;
}
```

Time complexity = O(1)

x = 6

peek() / pop()

↓ Deletes the topmost element from the stack.

↓ Prints the topmost element in the stack

Implementation