**42.How to implement stack operations using python?**

**Objective:**

* To implement the basic stack operations push and pop in python3.

**Process:**

* **Push:**

It used to insert a data in the stack.

It using append() to add the data into the stack.

* **Pop:**

It used to remove an element from the list.

Pop function removes the top element first.

Because stack follows first in last out principle.

**Input:**

* Stack.

**Output:**

* Stack after push and pop operation has been completed.

**Source code:**

class Stack:

def \_\_init\_\_(self):

self.stack = []

#add the element in a stack

def add(self, data):

if data not in self.stack:

self.stack.append(data)

return True

else:

return False

#Use show to look all elements in the stack

def show(self):

return self.stack

#remove an element from stack

def remove(self):

if len(self.stack) <= 0:

return ("No element in the Stack")

else:

return self.stack.pop()

#object creation

s = Stack()

#pass data in to the stack

s.add("sathish")

s.add("Bala")

s.add("krishna")

s.add("Prakash")

print("\*\*\*\*\*Original Stack is\*\*\*\*")

print(s.show())

print("\n")

#removing data from the stack

print("\*\*\*\*\*Removing following elements from stack\*\*\*\*")

print(s.remove())

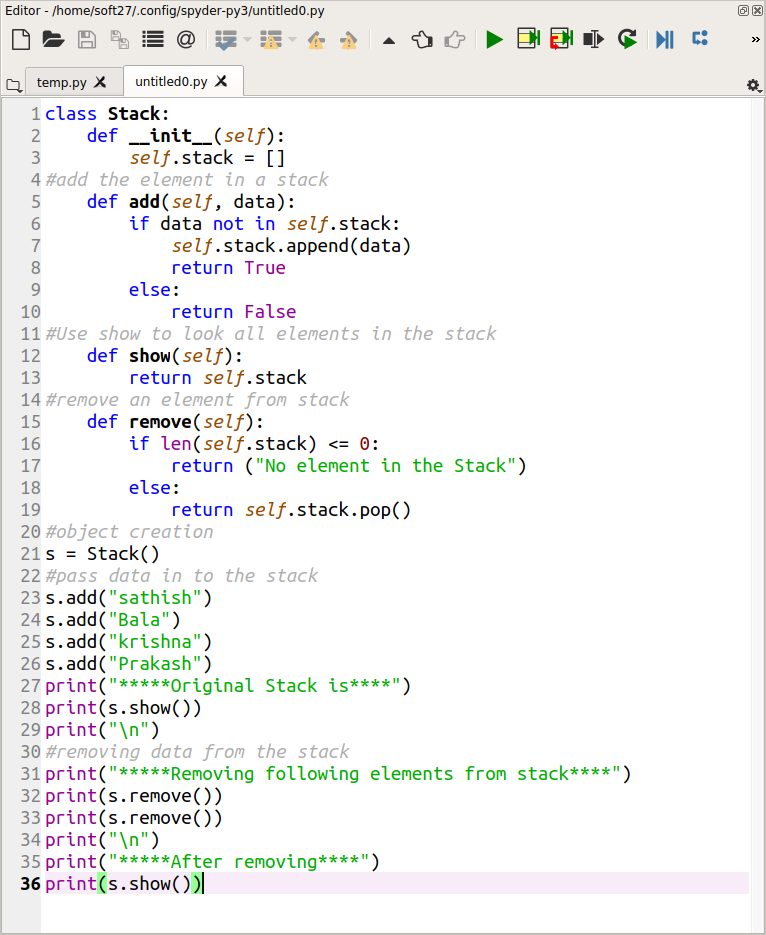
print(s.remove())

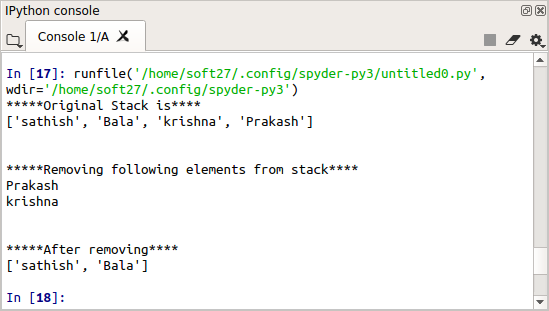
print("\n")

print("\*\*\*\*\*After removing\*\*\*\*")

print(s.show())

**Screen shot:**

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