# Converted Jupyter Notebook

## Markdown Cell

## 1. \*Code for LUHN Algorithm.\*

## Code Cell

def luhn\_check(card\_num):  
 dig\_check = int(card\_num[-1])  
 digits = card\_num[:-1]  
  
 rev\_digits = digits[::-1]  
  
 tot = 0  
 for i, ch in enumerate(rev\_digits):  
 n = int(ch)  
 if i % 2 == 0:  
 n = n \* 2  
 if n > 9:  
 n = n - 9  
 tot += n  
  
 tot += dig\_check  
 return tot % 10 == 0  
  
nums = "5893804115457289"  
if luhn\_check(nums):  
 print(nums, "is a Valid card number")  
else:  
 print(nums, "is Invalid")

## Markdown Cell

## Task 2: \*Remove Punctuations from String.\*

## Code Cell

def remove\_punct(line):  
 punct = '''!()-[]{};:'",<>./?@#$%^&\*\_~'''  
 result = ""  
 for char in line:  
 if char not in punct:  
 result += char  
 return result  
text = "Hello!!!--- How are you???"  
clean = remove\_punct(text)  
print("Original:", text)  
print("Without Punctuations:", clean)

## Markdown Cell

## Task 3: \*Sort Sentence in Alphabetical Order.\*

## Code Cell

def alpha\_sort(sent):  
 arr = []  
 for char in sent:  
 if (char >= 'A' and char <= 'Z') or (char >= 'a' and char <= 'z'):   
 arr.append(char)  
 l = len(arr)  
 for i in range(l):  
 for j in range(0, l - i - 1):  
 c1 = arr[j].lower()   
 c2 = arr[j+1].lower()  
 if c1 > c2:  
 t = arr[j]  
 arr[j] = arr[j+1]  
 arr[j+1] = t  
  
 answer = ""  
 for a in arr:  
 answer = answer + a  
 return answer  
  
  
text= "how arre YOU BRO?"  
  
result = alpha\_sort(text)  
  
print("org line:", text)  
print("sorted a-z:", result)