Write a python program to remove punctuations from the given string?

In [11]:
```
text = "Kuch bhi , kuch,bhi!"
punc = '''!()-[]{};:'"\,<>./?@#$%^&*_~'''

result = ""
for ch in text:
    if ch not in punc:
        result += ch

print(result)
```

```
Kuch bhi  kuchbhi
```

```
<>:2: SyntaxWarning: invalid escape sequence '\,'
<>:2: SyntaxWarning: invalid escape sequence '\,'
C:\Users\HP\AppData\Local\Temp\ipykernel_2660\1229437279.py:2: SyntaxWarning: invali
d escape sequence '\,'
  punc = '''!()-[]{};:'"\,<>./?@#$%^&*_~'''
```

Write a python program to sort the sentence in alphabetical order?

In [1]:
```
s = "I am Ahmed"
char = list(s)
for i in range(len(char)):
    for j in range(len(char)-i-1):
        if char[j] > char[j+1]:
            char[j],char[j+1] = char[j+1] , char[j]
var = "".join(char)
print("sorted:",var)
```

```
sorted:   AIadehmm
```

Code for LUHN Algorithm

In [9]:
```
def luhn(card_num):

    card_num = card_num.replace(" ", "").replace("-", "")
    print("Starting number:", " ".join(card_num))

    if not card_num.isdigit():
        print("Invalid input: only digits allowed")
        return False

    check_digit = int(card_num[-1])
    remaining_digits = card_num[:-1]
```

```
    print("Remove the last digit (check digit):", " ".join(remaining_digits), "X")

    reversed_digits = remaining_digits[::-1]
    print("Reversed digits:", " ".join(reversed_digits), "X")

    transformed_digits = []
    doubled_step = []
    subtracted_step = []

    for i, d in enumerate(reversed_digits):
        n = int(d)
        doubled = n
        if i % 2 == 0:
            doubled = n * 2
        doubled_step.append(str(doubled))

        if i % 2 == 0 and doubled > 9:
            doubled -= 9
        transformed_digits.append(doubled)
        subtracted_step.append(str(doubled))

    print("Doubled even indices:", " ".join(doubled_step), "X")
    print("Subtract 9 if > 9:", " ".join(subtracted_step), "X")

    total = sum(transformed_digits) + check_digit
    print("Summing digits + check digit:")
    print("+".join(map(str, transformed_digits)), "+", check_digit, "=", total)

    if total % 10 == 0:
        print(f"{card_num} is valid \n")
        return True
    else:
        print(f"{card_num} is invalid\n")
        return False

card = "5893804115457289"
luhn(card)
```

```
Starting number: 5 8 9 3 8 0 4 1 1 5 4 5 7 2 8 9
Remove the last digit (check digit): 5 8 9 3 8 0 4 1 1 5 4 5 7 2 8 X
Reversed digits: 8 2 7 5 4 5 1 1 4 0 8 3 9 8 5 X
Doubled even indices: 16 2 14 5 8 5 2 1 8 0 16 3 18 8 10 X
Subtract 9 if > 9: 7 2 5 5 8 5 2 1 8 0 7 3 9 8 1 X
Summing digits + check digit:
7+2+5+5+8+5+2+1+8+0+7+3+9+8+1 + 9 = 80
5893804115457289 is valid
```

Out[9]: True

In [ ]: