1. Write a Python program to calculate the length of a string(user input) without using len() method.

```python
string=str(input("Enter The String = "))
x=0

for i in string:
    x=x+1
print("Length Of the",string,"= ",x)
```

```
Enter The String = Ajith krishna
Length Of the Ajith krishna =  13
```

2. Write a Python program to check if a given string(user input) is a palindrome.

```python
# method 1
word=input("Enter the Word = ")

if word==word[-1: :-1]:
    print(word,"is Palindrome ")
else:
    print(word,"is not a palindrome")
```

```
Enter the Word = mom
mom is Palindrome
```

```python
# method 2

words=input("Enter the Word = ")

empty=""

for i in words:
    empty=i+empty
if words==empty:
    print(words,"is a palindrome")
else:
    print(words,"is not a palindrome")
```

```
Enter the Word = ajith
ajith is not a palindrome
```

3. Write a Python program to check if a string(user input) has at least one letter and one number.

```python
string=input("Enter the String = ")

if string.isalpha():
    print(string,"is a string")
elif string.isdigit():
    print(string,"is a number")
elif string.isalnum():
    print("output = ",string,"is a string but its a alpha numeric value")
```

```
Enter the String = ajith123
output =  ajith123 is a string but its a alpha numeric value
```

4. Write a Python program to count the number of occurrences of a specific character in a given sentence. Take both sentence and specific character from the user.

```python
sentence=input("Enter the Sentence = ")
specific_character=input("Enter The Specific Character = ")

x=sentence.count(specific_character)

print("The Count of = ",x)
```

```
Enter the Sentence = ajithkrishna239@gmail.com
Enter The Specific Character = a
The Count of =  3
```

5. Write a Python program to determine if a given sentence(user input) contains any numbers. If any numbers are present, remove them from the sentence.

```python
sentence=input("Enter The Sentence = ")

for i in sentence:
    if i in "0123456789":
        continue
    print(i, end=" ")
```

```
Enter The Sentence = ajith@123gmail.com
a j i t h @ g m a i l . c o m
```