

In [\*]: *#1. Write a Python program to read a file line by line and store it into a list*

```
a=[]  
with open(r"C:\Users\yashw\new_file.txt") as f:  
    g=f.readlines()  
    a.append(g)  
print(a)
```

In [\*]: *#2. Write a Python program to count the number of lines in a text file.*

```
with open(r"C:\Users\yashw\new_file.txt") as f:  
    lines = len(f.readlines())  
print('Total Number of lines:', lines)
```

In [\*]: *#3. Write a Python program to list the name of text files only from directory  
#with file name and count of words.*

```
import os  
  
directory_path = "C:\Users\yashw\new_file.txt"  
text_files = [file_name for file_name in os.listdir(directory_path) if file_name.endswith('.txt')]  
  
for file_name in text_files:  
    with open(os.path.join(directory_path, file_name), 'r') as file:  
        words = file.read().split()  
        word_count = len(words)  
        print(f"{file_name}: {word_count} words")
```

In [\*]: *#4. Write a Python program that calculates the area and perimeter of Rectangle  
#entered by the user.*

```
s = int(input("Side : "))  
area = s * s  
perimeter = 4 * s  
print("Area of Rectangle : ", area)  
print("Perimeter of Rectangle : ", perimeter)
```

In [\*]: #5. Write a Python program that removes and prints every third number from a list

```
def remove_nums(int_list):
    #list starts with 0 index
    position = 3 - 1
    idx = 0
    len_list = (len(int_list))
    while len_list>0:
        idx = (position+idx)%len_list
        print(int_list.pop(idx))
        len_list -= 1
nums = [10,20,30,40,50,60,70,80,90]
remove_nums(nums)
```

In [\*]: #6. Write a Python program to find the median among three given numbers.

```
x = input("Input the first number")
y = input("Input the second number")
z = input("Input the third number")
print("Median of the above three numbers -")

if y < x and x < z:
    print(x)
elif z < x and x < y:
    print(x)

elif z < y and y < x:
    print(y)
elif x < y and y < z:
    print(y)

elif y < z and z < x:
    print(z)
elif x < z and z < y:
    print(z)
```

In [\*]: #7. Write a Python program to swap commas and dots in a string.

```
def Replace(str1):
    str1 = str1.replace(',', 'third')
    str1 = str1.replace('.', ',')
    str1 = str1.replace('third', '.')
    return str1

string = "14, 625, 498.002"
print(Replace(string))
```

```
In [*]: #8. Write a Python program to extract numbers from a given string.
def test(str1):
    result = [int(str1) for str1 in str1.split() if str1.isdigit()]
    return result

str1 = "red 12 black 45 green"
print("Original string:", str1)
print("Extract numbers from the said string:")
print(test(str1))
```

```
In [*]: #9. Write a Python program to create a dictionary from a string.

str1 = 'ram'
my_dict = {}
for letter in str1:
    my_dict[letter] = my_dict.get(letter, 0) + 1
print(my_dict)
```

```
In [*]: #10. Write a Python program to check if multiple keys exist in a dictionary
student = {
    'name': 'Alex',
    'class': 'V',
    'roll_id': '2'
}
print(student.keys() >= {'class', 'name'})
print(student.keys() >= {'name', 'Alex'})
print(student.keys() >= {'roll_id', 'name'})
```



```
In [*]: #11.    Build a calculator using Python program. Take input as required and do
# This function adds two numbers
def add(x, y):
    return x + y

# This function subtracts two numbers
def subtract(x, y):
    return x - y

# This function multiplies two numbers
def multiply(x, y):
    return x * y

# This function divides two numbers
def divide(x, y):
    return x / y

print("Select operation.")
print("1.Add")
print("2.Subtract")
print("3.Multiply")
print("4.Divide")

while True:
    # take input from the user
    choice = input("Enter choice(1/2/3/4): ")

    # check if choice is one of the four options
    if choice in ('1', '2', '3', '4'):
        try:
            num1 = float(input("Enter first number: "))
            num2 = float(input("Enter second number: "))
        except ValueError:
            print("Invalid input. Please enter a number.")
            continue

        if choice == '1':
            print(num1, "+", num2, "=", add(num1, num2))

        elif choice == '2':
            print(num1, "-", num2, "=", subtract(num1, num2))

        elif choice == '3':
            print(num1, "*", num2, "=", multiply(num1, num2))

        elif choice == '4':
            print(num1, "/", num2, "=", divide(num1, num2))

        # check if user wants another calculation
        # break the while loop if answer is no
        next_calculation = input("Let's do next calculation? (yes/no): ")
        if next_calculation == "no":
            break
```

```
else:
    print("Invalid Input")
```

In [\*]: #12. Write a Python program to extract mobile number and pan number from te

```
import re
string='''If you would like to get in touch with us through other ways,
the Flipkart customer support number is 018002089898.
And we're just a call away if you need anything.
You can also arrange a call-back from within the
Flipkart app regarding any issue related to your order.'''
Phonenumber=re.compile(r'\d\d\d\d\d\d\d\d\d\d\d\d')
m=Phonenumber.search(string)
print('mobile number found from the string : ',m.group())
def isValid(Z):
    Result=re.compile("[A-Za-z]{5}\d{4}[A-Za-z]{1}")
    return Result.match(Z)

z="asdfg frgth ABCDE9999K"
a=z.split()
for i in a:
    if (isValid(i)):
        print(i)
```

In [ ]: