Assignment

1. Write a function in python to read the content from a text file "ABC.txt" line by line and display the same on screen.

```
file=open("ABC.txt","w")
file.write("hello welcome to new example")
file=open("ABC.txt","r")
content=file.read()
print(content)
file.close
```

```
hello welcome to new example
<function TextIOWrapper.close()>
```

2.Write a function in Python to count and display the total number of words in a text file "ABC.txt"

```
def count_words():
    file = open("ABC.txt", "r")
    words = file.read().split()
    print("Total words:", len(words))
    file.close()
count_words()
```

```
Total words: 5
```

3. Write a function in Python to count uppercase character in a text file "ABC.txt"

```
def count_uppercase():
    count = 0
    file = open("ABC.txt", "r")
    for line in file:
        for ch in line:
            if ch.isupper():
                count += 1
    print("Uppercase characters:", count)
    file.close()
count_uppercase()
```

```
Uppercase characters: 0
```

4.Write a function display_words() in python to read lines from a text file "story.txt", and display those words, which are less than 4 characters.

```
file=open("story.txt","w")
file.write("I Love Programming ")
def display_words():
    file = open("story.txt", "r")
    for line in file:
        for word in line.split():
            if len(word) < 4:
                print(word)
    file.close()
display_words()
```

```
I
```

Assignment

1. Write a Python program to handle a ZeroDivisionError exception when dividing a number by zero.

```
try:
    a = int(input("Enter numerator: "))
```

```
        b = int(input("Enter denominator: "))
        print(a / b)
    except ZeroDivisionError:
        print("Error: Division by zero")
```

```
Enter numerator: 3
Enter denominator: 7
0.42857142857142855
```

2.Write a Python program that prompts the user to input an integer and raises a ValueError exception if the input is not a valid integer.

```
try:
    num = int(input("Enter an integer: "))
    print("Number:", num)
except ValueError:
    print("Error: Invalid integer")
```

```
Enter an integer: c
Error: Invalid integer
```

3. Write a Python program that opens a file and handles a FileNotFoundError exception if the file does not exist.

```
try:
    file = open("data.txt", "r")
    print(file.read())
    file.close()
except FileNotFoundError:
    print("Error: File not found")
```

```
Error: File not found
```

4. Write a Python program that prompts the user to input two numbers and raises a TypeError exception if the inputs are not numerical

```
try:
    a = input("Enter first number: ")
    b = input("Enter second number: ")
    if not (a.isdigit() and b.isdigit()):
        raise TypeError
    print("Sum:", int(a) + int(b))
except TypeError:
    print("Error: Inputs must be numbers")
```

```
Enter first number: c
Enter second number: 56
Error: Inputs must be numbers
```