1.Write a python function that copies file reading and writing upto 50 characters at a time

In [6]:
```
def copy_file():
    f=open('demo.txt','r')
    count=0
    content=f.read()
    raw=[]
    for i in content:
        if count<50:
            raw.append(i)
            count+=1
        print(content.read)
    f.close()
copy_file()
```

2.Print all numbers present in a text file and print number of blank spaces present in that file

In [36]:
```
f1=(open('first.txt','r'))
content=f1.read()
raw1=[]
count1=0
count2=0
for i in content:
    raw1.append(i)
    if i==' ':
        count1+=1
import re
numbers=re.findall(r'\d+',content)
print('Numbers are : ', numbers)


print('Number of spaces are ',count1)
```

```
Numbers are :  []
Number of spaces are  3
```

3. Write a function called sed that takes as argument a pattern string, a replacement string, and two fienames;. It should read the file first and write the contents into the second file. If the pattern string appears anywhere in the file, it should be replaced with a replacement string. If an error occurs while opening, reading, writing, or closing strings, your program should catch the exception, print an error message, and exit

In [51]:
```
file=open('input.txt','w')
file.write('Allah is Omnipotent, and He is Above anything else!')

file.close()
```

In [52]:
```
file1=open('output.txt','w')
file1.write('The Prophet (PBUH) was the best human in realizing the denotation of the words Allah is the Greate

file1.close()
```

In [65]:
```
def sed(pattern, replacement, in_f, out_f):
   try:
        with open(in_f, "r") as infile, open(out_f, "w") as outfile:
         for line in infile:
             modified_line=line.replace(pattern, replacement)
             outfile.write(modified_line)
   except Exception as e:

       print("An error occurred:", str(e))

sed("old pattern", "new pattern", "input.txt", "output.txt")
```

In [ ]:

```
```

5 write a python code to search for and replace with in the text file

In [68]:

```
f4=open('large_file.txt','w')
f4.write('Our Prophet Muhammad (sallallahu ‘alayhi wa sallam) said: “The seven Heavens compared to the Kursee (
```

Out[68]:

```
160
```

In [81]:

```
file_path = 'large_file.txt'
search_text = (input('Enter the text that you want to replace'))
replace_text = 'Great'
with open(file_path, 'r') as file:
    file_content = file.read()
updated_content = file_content.replace(search_text, replace_text,4)
with open(file_path, 'w') as file:
    file.write(updated_content)
print(f"Text '{search_text}' has been replaced with '{replace_text}' in '{file_path}'.")
```

```
Enter the text that you want to replacethe
Text 'the' has been replaced with 'Great' in 'large_file.txt'.
```

In [84]:

```
##multiple replacements
import re
file_path = 'large_file.txt'
replacements = {
    'is': 'am',
    'for': 'that'
}
with open(file_path, 'r') as file:
    file_content = file.read()
def multiple_replace(text, replacements):
    pattern = re.compile("|".join([re.escape(key) for key in replacements.keys()]))
    return pattern.sub(lambda x: replacements[x.group()], text)
updated_content = multiple_replace(file_content, replacements)
with open(file_path, 'w') as file:
    file.write(updated_content)
print("Multiple replacements have been performed in '{file_path}'.")
```

```
Multiple replacements have been performed in '{file_path}'.
```

6.write a python script that concatenates the contents of multiple text files in to a single output file.Allowthe user to specify output file and input file

In [14]:

```
def concatenate_files (input_files, output_file):
    try:
        with open(output_file, 'w') as output:
            for input_file in input_files:
                with open(input_file,'r' ) as file:
                    output.write(file.read())
        print(f"Concatenated {len(input_files)} files into {output_file}")
    except Exception as e:
        print("An error occurred: (str(e)}")
if __name__=="__main__":
    input_files = []
    while True:

        file_name = input("Enter an input file (or type 'empty' to finish): ")
        if file_name.lower() == 'empty':
            break
        input_files.append(file_name)

    output_file = input("Enter the output file name: ")

    concatenate_files (input_files, output_file)
```

```
Enter an input file (or type 'empty' to finish): empty
Enter the output file name: tauheer
Concatenated 0 files into tauheer
```

7

In [18]:

```
#  1)Read words from input file
f8=open('input.txt','r')
content1=f8.read()
print(content1)
```

```
Allah is Omnipotent, and He is Above anything else!
```

In [19]:
```
# 2) for each word in the input file,xaalculate length of word and store it in a dictionary where the word is k
# Initialize an empty dictionary to store word is the key and the length is value
word_lengths = {}

# Open the input file for reading
with open('input.txt', 'r') as file:
    # Iterate through each line in the file
    for line in file:
        # Split the line into words
        words = line.split()
        # Iterate through each word
        for word in words:
            # Calculate the length of the word
            word_length = len(word)
            # Store the word and its length in the dictionary
            word_lengths[word] = word_length

# Print the dictionary
for word, length in word_lengths.items():
    print(f'{word}: {length}')
```

```
Allah: 5
is: 2
Omnipotent,: 11
and: 3
He: 2
Above: 5
anything: 8
else!: 5
```

In [26]:
```
word_lengths = {}
with open('input.txt', 'r') as file:
    for line in file:
        words = line.split()
        for word in words:
            word_length = len(word)
            word_lengths[word] = word_length
with open('output.txt', 'w') as output_file:
    for word, length in word_lengths.items():
        output_file.write(f'{word}: {length}\n')
print("Transfer of dictionary to the output.txt was done successfully")
f9=open('output.txt','r')
content=f9.read()
print(content)
```

```
Transfer of dictionary to the output.txt was done successfully
Allah: 5
is: 2
Omnipotent,: 11
and: 3
He: 2
Above: 5
anything: 8
else!: 5
```

In [ ]:

In [ ]: