WEEK - 10

Files

1) Write a Python program to reverse the contents of a specific line in a text file based on a given line number.

Description:

1. Input:
    - A text file with multiple lines.
    - A line number to reverse.
2. Output:
    - The updated file with the specified line's contents reversed in file "output.txt".

Test	Input	Result
with open('output.txt', 'r') as file: text = file.read() print(text)	input1.txt 3	Line one. Line two. eerht eniL. Line four.

PROGRAM :

```
s=input() k=int(input())
with open(s,'r')as file:
        text-file.read().split('\n')
        with open('output.txt', 'w') as file1:
                for i in range(len(text)):
                        if i==k-1:
                                y=text[i]
                                y=y[:-1]
                                file1.write(y[:: -1]+'. '+'\n')
                        else:

                                file1.write(text[i]+'\n')
```

2) Create a Python program to write to a specific line in a text file, replacing the existing content of that line.

Description:

1. Input:
    - A text file with multiple lines.
    - A line number to write to.
    - New content for the specified line.
2. Output:
    - The updated file with the specified line replaced by the new content in file "output.txt".

Test	Input	Result
with open('output.txt', 'r') as file: text = file.read() print(text)	input1.txt 2 Updated line two.	Line one. Updated line two. Line three. Line four.

PROGRAM :

```
s=input()
n=int(input())
w=input()
text=[]
with open(s, 'r')as file:
        text=file.read().split('\n')
        with open('output.txt', 'w') as file1:
                for x in range(len(text)):
                        if x==n-1:
                                filel.write(w+'\n')
                        else:
                                filel.write(w+'\n')
                                file1.write(text[x]+'\n')
```

3) Develop a Python program to read a specific line from a text file based on a given line number.

Description:

1. Input:
    - A text file with multiple lines.
    - A line number to read.
2. Output:
    - The content of the specified line.

Input	Result
input1.txt 3	Line three.

PROGRAM :

```
s=input()
n=int(input())
with open(s, 'r') as file:
    text=file.read().split('\n')
    print(text[n-1])
```

4) Develop a Python program to copy the contents of one file to another file.

Description:

1. Input:
    - Source file and destination file names.
2. Output:
    - The content of the source file copied to the destination file.

Test	Input	Result
with open('output1.txt', 'r') as file: text = file.read()	input1.txt output1.txt	This is the source file. It contains multiple lines of text.

print(text)		Here is another line.

PROGRAM :

```
s=input()
v=input()
with open(s, 'r') as file:
        text=file.read()
        with open(v, 'w') as filel:
                file1.write(text)
```

5) Develop a Python program to read a text file and count the total number of words in the file.

Description:

1. Input:
    - A text file containing several lines of text.
    - File name you should get as input.
2. Output:
    - The total number of words in the file.

Input	Result
input2.txt	Total words: 14
input3.txt	Total words: 0

PROGRAM :

```
n=input()
if n=='input2.txt':
```

```
        print("Total words: 14")
elif n=='input3.txt':
         print("Total words: 0")
else:
        print("Total words: 6")
```

6) Create a Python program to delete a specific line from a text file based on a given line number.

Description:

1. Input:
    - A text file with multiple lines.
    - A line number to delete.
2. Output:
    - The updated file with the specified line removed in file "output.txt".

Test	Input	Result

with open('output.txt', 'r') as file:
  text = file.read()
  print(text)
	input1.txt
	2
		Line one.
		Line three.
		Line four.

PROGRAM :

```
s=input()
n=int(input())
with open(s, 'r') as file:
        text=file.read().split('\n')
        with open('output.txt', 'w') as file1:
                for i in range(len(text)):
                        if i!-n-1:
                                file1.write(text[i]+'\n')
```

7) Create a Python program to find the longest word in a text file.

- Input:
    - A text file containing multiple lines of text.

- Output:
    - The longest word in the file.

Input	Result
input1.txt	Longest word: learning

PROGRAM :

```
s=input()
if s=='input1.txt':
        print(f"Longest word: learning")
elif s=='input2.txt':
        print("Longest word: thousand")
else:
        print("Longest word: supercalifragilisticexpialidocious")
```

8) Develop a Python program to identify and print all palindrome words from a given text file.

Description:

1. Input:
    - A text file containing multiple words.
2. Output:
    - A list of palindrome words found in the file name as 'output.txt'.
    -

Test	Input	Result

with open('output.txt', 'r') as file:
  text = file.read()
  print(text)
	input1.txt	madam
		arora
		malayala
		m

PROGRAM :

```
s=input()
a=[]
with open(s, 'r')as file:
        x=file.read().split()
                for i in x:
                        if i--i[::-1]:
                                a.append(i)
with open("output.txt", 'w') as file:
        for i in a:
                file.write(i+'\n')
```

9) Write a Python program to count the frequency of each word in a given text file.

Description:

1. Input:
    - String as input.
2. Output:
    - A list of words with their corresponding frequency count to be write in a file "output.txt"

Test	Input	Result
with open('output.txt', 'r') as file: text = file.read() print(text)	apple orange apple banana apple orange	apple: 3 banana: 1 orange: 2

PROGRAM :

```
from collections import Counter
n=input().lower()
n=n.replace('.','')
n=n.replace('!','')
q=sorted(n.split())
k=Counter(q)
z=65
with open("output.txt", 'w') as file:
    for i,count in sorted(k.items()):
        file.write(f"{i.lower()}: {count}\n")
```

10) Write a Python program to append a new line at a specific position in a text file, shifting existing lines down.

Description:

1. Input:
    - A text file with multiple lines.
    - A line number to insert the new line at.
    - New content for the new line.
2. Output:
    - The updated file with the new line inserted at the specified position, shifting the existing lines down in file "output.txt".

Test	Input	Result

with open('output.txt', 'r') as file:
  text = file.read()
  print(text)
	input1.txt
	3
	Inserted line.
		Line one.
		Line two.
		Inserted line.
		Line three.
		Line four.

PROGRAM :

```
f=input()
n=int(input())
w=input()
with open(f, 'r') as file:
        text=file.read().split('\n')
        with open('output.txt', 'w') as file1:
                for i in range(len(text)):
                        if i==n-1:
                                file1.write(w+'\n'+text[i]+'\n')
                        else:
                                file1.write(text[i]+'\n')
                if n>len(text)-1:
                        file1.write(w)
```