

Netaji Subhash Engineering College
Department of Computer Science & Engineering
B. Tech CSE 2nd Year 3rd Semester
2023-2024

Name of the Course: IT Workshop (Python)

Course Code: PCC-CS393

Name of the Student: ARITTRA BAG

Class Roll No.: 103

University Roll No.: 10900122105

Date of Experiment: 10/11/2023

Date of Submission: 10/02/2024

Assignment No.: A10_01

Problem Statement:

Write a program to accept a file name from the user and count the number of words present in the file.

Python Code:

try:

 file_name = input("Enter the file name: ")

 with open(file_name, 'r') as file:

 num_words = len(file.read().split())

 print(f"The number of words in the file '{file_name}' is: {num_words}")

except Exception as e:

 print(e)

Sample file:

Here I am
standing op

Sample Output(s):

Enter the file name: temp.txt
Number of words in the file: 5

Assignment No.: A10_02

Problem Statement:

Write a program to print each line of a file in reverse order.

Python Code:

try:

```
file_name = input("Enter the file name: ")
```

```
with open(file_name, 'r') as file:
```

```
    for line in file.readlines():
```

```
        print(line[::-1])
```

```
except Exception as e:
```

```
    print("Error Occured: ",e)
```

Sample file:

Here I am
standing op

Sample Output(s):

Enter the filename: temp.txt

ma I ereH
po gnidnats

Assignment No.: A10_03

Problem Statement:

Write a program to reverse the content of a file and store it in another file.

Python Code:

try:

```
file_name = input("Enter the file name: ")
```

```
with open(file_name, 'r') as file:
```

```
    with open('rev_file.txt', 'w') as out:
```

```
        out.write(file.read()[::-1])
```

except Exception as e:

```
    print("Error Occured: ",e)
```

Sample file:

Here I am

standing op

Sample Output(s):

Enter the name of the input file: temp.txt

Enter the name of the output file: rev_file.txt

Sample output file:

po gnidnats

ma l ereH

Assignment No.: A10_04

Problem Statement:

Write a program to copy the first 100 characters of a binary file into another.

Python Code:

```
try:
    with open('input.bin', 'rb') as input_file, open('output.bin', 'wb') as output_file:
        first_100_chars = input_file.read(100)
        output_file.write(first_100_chars)
        print("Copy successful.")
except Exception as e:
    print(f"An error occurred: {e}")
```

Sample input file:

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est laborum.

Sample Output(s):

Enter the input filename: input.bin
Enter the output filename: output.bin

Sample output file:

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore

Assignment No.: A10_05

Problem Statement:

Write a program to copy the content of the text file to another file by converting all lowercase characters to uppercase.

Python Code:

```
try:
    file_name = input("Enter the file name: ")
    out_name = input("Enter the Output File Name: ")
    with open(file_name, 'r') as file:
        with open(out_name, 'w') as out:
            out.write(file.read().upper())
except Exception as e:
    print("Error Occured: ",e)
```

Sample input file:

Here I am
standing op

Sample Output(s):

Enter the input filename: temp.txt
Enter the output filename: sample.txt

Sample output file:

HERE I AM
STANDING OP

Assignment No.: A10_06

Problem Statement:

Write a program to copy one Python script into another in such a way that all comment lines are skipped and not copied to the destination file.

Python Code:

```
infile=input("Enter the file name: ")
ofile=input("Enter the Output File Name: ")
with open(infile,'r') as file:
    with open(ofile,'w') as out:
        comb = False
        for line in file:
            if "" in line:
                comb = not comb
                continue
            elif comb:
                continue
            elif line.strip().startswith('#') or '#' in line:
                out.write(line.split('#')[0])
            else:
                out.write(line)
print("Copy successful.")
```

Sample input file:

```
abcdefg hhhhh
hijklmnop #ayansucks
#that sucks
zzzzzz
'''
something
'''
bingo #amazing
```

Sample Output(s):

```
Enter the input filename: temp.txt
Enter the output filename: gen.txt
```

Sample output file:

```
abcdefg hhhhh
hijklmnop zzzzzz
bingo
```