File Handling Practice Sheet

1. Create a file named students.txt and write the following text into it:

Alice scored 85 in mathematics.

Bob scored 78 in science.

Charlie scored 92 in English.

2. Write a function to replace every occurrence of a score greater than 80 with the word "Excellent" in the file students.txt.

3. Check whether the word "science" exists in the file students.txt.

4. Write a function to find the first line where the word "scored" appears in the file students.txt. Print the line number, or -1 if the word is not found.

5. Create a file grades.txt containing grades separated by spaces (e.g., A B C A D A B). Write a program to count how many times the grade A appears in the file.

6. Create a file named story.txt and write a short story into it. Write a program to calculate the frequency of each word in the file and print the 5 most frequently occurring words.

7. Create a file phrases.txt containing several lines of text. Write a function to identify and extract unique lines from the file and save them into a new file unique_phrases.txt.

8. Create a file words.txt containing a list of words, one per line. Write a program to identify all palindromic words (e.g., "madam") and save them into a new file palindromes.txt.

9. Create a file named inventory.txt with the following lines:

Item: Apple, Quantity: 50

Item: Orange, Quantity: 30

Item: Banana, Quantity: 20

10. Write a program using r+ mode to:

Replace the quantity of "Orange" with 100.

Append a new line: Item: Mango, Quantity: 40.

11. Write a program to create a file results.txt using w+ mode. Overwrite the file with the following text:

John: 78

Doe: 85

Jane: 92

Then read the file content and print the name of the student with the highest score