Python Assignment – (Regular Expression)

1. Develop a function that takes a text and a list of forbidden words. Replace all occurrences of these forbidden words with asterisks (*) using regular expressions.

2. Create a function that extracts all the dates from a given text using regular expressions. Dates can be in various formats like MM/DD/YYYY, DD-MM-YYYY, or written out like January 1, 2023. Extract all such date occurrences.

3. Develop a function that counts the occurrences of each word in a given text. Use regular expressions to split the text into words and then count the frequency of each word.

4. Write a function that extracts all the URLs from a given text using regular expressions. Return a list of URLs found in the input text.

5. Write a Python function that takes an email address as input and uses a regular expression to validate if it is a valid email address. The function should return True for valid emails and False for invalid ones.