**QUESTION:**

Write a program in java to Enter a string and find out the frequency of the word given by user in the string.

Class name: Word

Data members:

String str: to store input string.

String word: to store the word.

Int f: to store the frequency of the word.

Member method:

Sentence (string st, String w): parameterized constructor to initialize str with st, ch with c and f with its default value.

Void find(): to find the frequency of the word in the string.

Write a main method to make a object of the class and invoke above methods properly.

**Algorithm:**

1. **Start**
2. Define a class Word with three instance variables str, word, and f.
3. Define a constructor for the class that takes a string st and another string w as input. Set str to st, word to w, and f to 0.
4. Define a method find:
   * 1. Split str into an array of words.
     2. For each string s in the array of words, if s equals word, increment f.
     3. Print the frequency of the word word in str.
5. In the main method:
   * 1. Create a Scanner object sc.
     2. Prompt the user to enter a sentence.
     3. Read a line s from the user.
     4. Prompt the user to enter a word to find.
     5. Read a word w from the user.
     6. Create a Word object obj with s and w.
     7. Call the find method of obj.
     8. Close the scanner.
6. **End**

**Variable Description Table**

|  |  |  |
| --- | --- | --- |
| **Variable Name** | **Variable Type** | **Description** |
| str | String | The sentence input by the user. |
| word | String | The word to find in the sentence. |
| f | Integer | The frequency of the word ‘word’ in the sentence str. |
| s | String | The sentence input by the user in the main method. |
| w | String | The word to find in the sentence, input by the user in the main method. |
| obj | Class | An instance of the word class. |
| sc | Scanner | A Scanner object used to read input from the user. |