

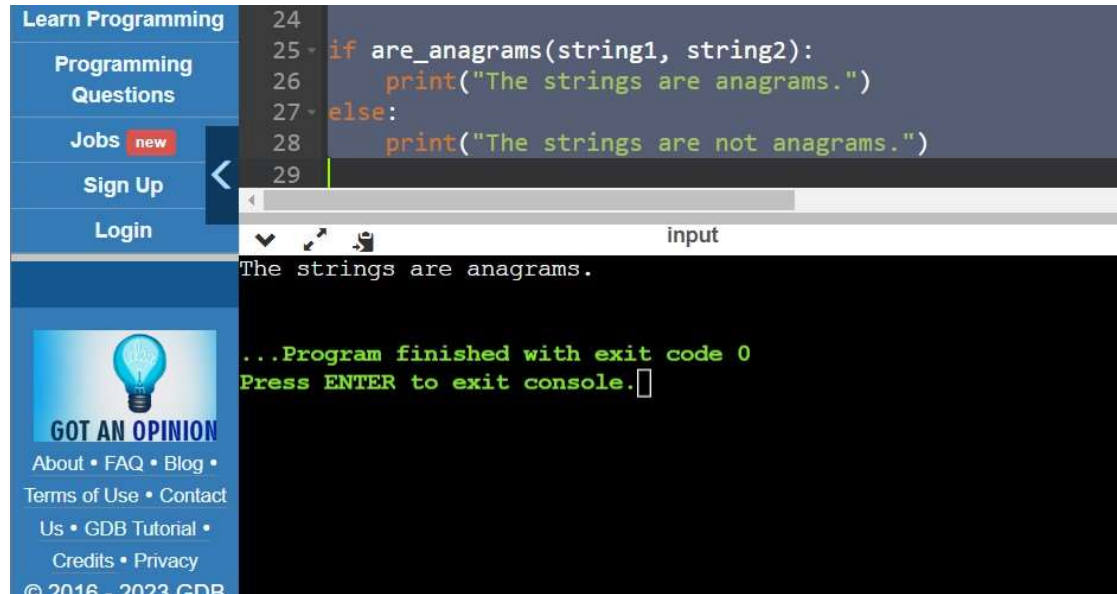
**Problem 4:** Check for Anagrams

```
def are_anagrams(str1, str2):  
    str1 = str1.lower().replace(" ", "")  
    str2 = str2.lower().replace(" ", "")  
  
    if len(str1) != len(str2):  
        return False  
  
    char_count1 = {}  
    char_count2 = {}  
  
    for char in str1:  
        char_count1[char] = char_count1.get(char, 0) + 1  
    for char in str2:  
        char_count2[char] = char_count2.get(char, 0) + 1  
  
    if char_count1 == char_count2:  
        return True  
    else:  
        return False  
  
string1 = "listen"  
string2 = "silent"  
  
if are_anagrams(string1, string2):
```

```
print("The strings are anagrams.")
```

```
else:
```

```
print("The strings are not anagrams.")
```



The screenshot shows a web browser window. On the left is a blue sidebar with navigation links: "Learn Programming", "Programming Questions", "Jobs" (with a red "new" badge), "Sign Up", and "Login". Below these links is a section titled "GOT AN OPINION" with a lightbulb icon and links for "About", "FAQ", "Blog", "Terms of Use", "Contact Us", "GDB Tutorial", "Credits", and "Privacy". The main content area features a code editor with Python code for an anagram checker. The code is as follows:

```
24
25 if are_anagrams(string1, string2):
26     print("The strings are anagrams.")
27 else:
28     print("The strings are not anagrams.")
29
```

Below the code editor is a terminal window. The input field contains the text "input". The terminal output shows "The strings are anagrams." followed by "...Program finished with exit code 0" and "Press ENTER to exit console." with a cursor.