

75) Brute Force String Matching

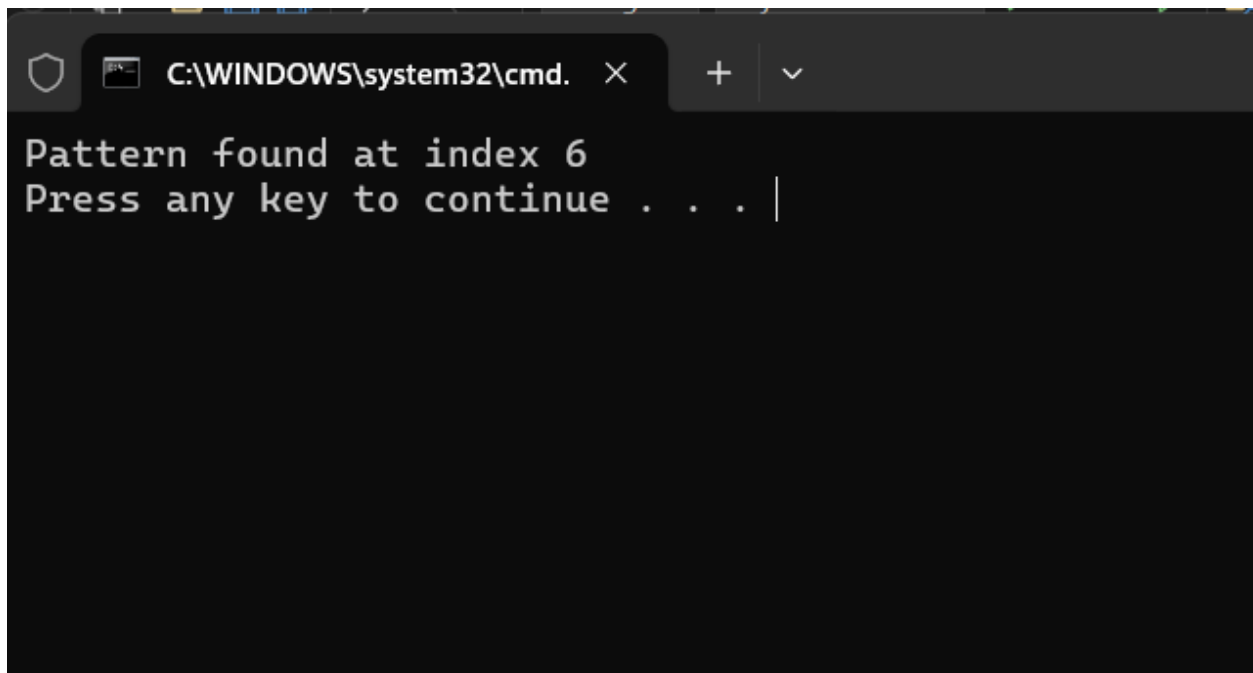
CODE:

```
def brute_force(text, pattern):
    n = len(text)
    m = len(pattern)
    for i in range(n - m + 1):
        j = 0
        while j < m and text[i + j] == pattern[j]:
            j += 1
        if j == m:
            return i
    return -1

text = "hello world"
pattern = "world"
index = brute_force(text, pattern)

if index != -1:
    print(f"Pattern found at index {index}")
else:
    print("Pattern not found")
```

OUTPUT:

A screenshot of a Windows Command Prompt window. The title bar shows the path 'C:\WINDOWS\system32\cmd.' with a close button. The command prompt displays the output of the program: 'Pattern found at index 6' followed by 'Press any key to continue . . . |' with a cursor. The window has a dark background and standard Windows window controls.

TIME COMPLEXITY : $O(n*m)$