

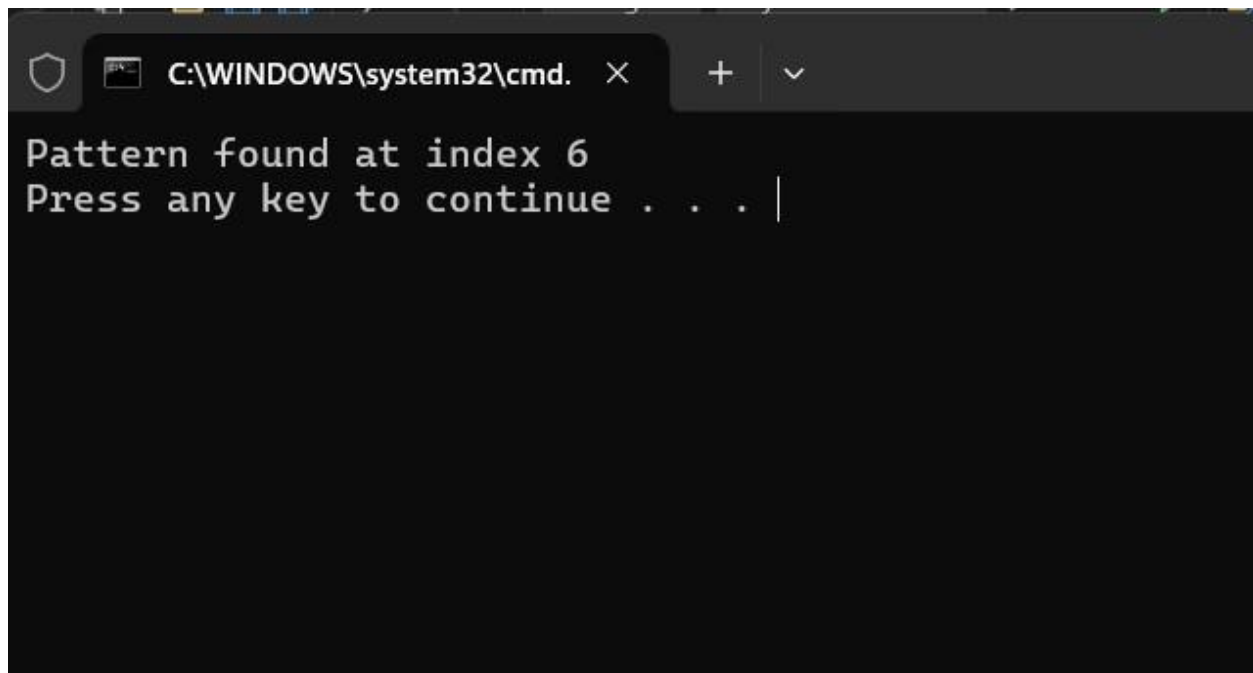
## 75) Brute Force String Matching

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.' and standard window controls. The command prompt displays the output of the program: 'Pattern found at index 6' followed by 'Press any key to continue . . . |' with a vertical cursor line.

TIME COMPLEXITY :  $O(n*m)$