```
def calculate_char_frequency(string):
    frequency = {}
    for char in string:
        if char in frequency:
            frequency[char] += 1
        else:
            frequency[char] = 1

    return frequency

input_string = "hello world"
result = calculate_char_frequency(input_string)

print("Character frequencies:")
for char, freq in result.items():
    print(f"'{char}': {freq}")
```