```
def longest_word(string):
    words = string.split()
    longest = max(words, key=len)
    return longest

def char_frequency(string, char):
    return string.count(char)

def is_palindrome(string):
    return string == string[::-1]

def first_appearance(string, substring):
    return string.find(substring)

def word_occurrences(string):
    words = string.split()
    word_count = {}
    for word in words:
        if word in word_count:
            word_count[word] += 1
        else:
            word_count[word] = 1
    return word_count

# Example usage
input_string = "This is my first program"
print("Longest word:", longest_word(input_string))
print("Frequency of 's':", char_frequency(input_string, 's'))
print("Is palindrome:", is_palindrome(input_string))
print("First appearance of 'sample':", first_appearance(input_string, 'sample'))
print("Word occurrences:", word_occurrences(input_string))
```