Python assignment-3

1. Reverse the order of words in a sentence

```
def reverse_words(sentence):
return ' '.join(sentence.split()[::-1])
```

2. Count consonants in a string (ignore case)

```
def count_consonants(s):
vowels = 'aeiou'
return sum(1 for c in s.lower() if c.isalpha() and c not in vowels)
```

3. Check if two strings are anagrams (ignore case)

```
def is_anagram(s1, s2):
return sorted(s1.lower()) == sorted(s2.lower())
```

4. Find the first unique character in a string (case-sensitive)

```
def first_unique_char(s):
for c in s:
if s.count(c) == 1:
return c
return None
```

5. Compress a string by replacing repeated characters

```
def compress_string(s):
compressed = ''
i = 0
while i < len(s):
count = 1
while i + 1 < len(s) and s[i] == s[i+1]:
i += 1
count += 1
compressed += s[i] + str(count)
i += 1
return compressed if len(compressed) < len(s) else s
```

6. Longest palindromic substring

```
def longest_palindrome(s):
def expand(l, r):
while l >= 0 and r < len(s) and s[l] == s[r]:
l -= 1
r += 1
return s[l+1:r]
```