



FEU Institute of Technology

MACHINE PROBLEM

4

Type of Collection

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<W22>

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Create a Python program using custom defined function that will simulate execute the following statement.

1. Get the numbers of vowels on a given string
2. Check if the given string is palindrome (incase sensitive)
3. Get the sum of the numbers found on a given string
4. Get the number of words found on a given string

## Source Code 1:

```
# Number 1
def number_of_vowels(word_string):
    count = 0
    for x in word_string:
        if x.lower() == 'a' or x.lower() == 'e' or x.lower() == 'i' or x.lower() == 'o' or x.lower() == 'u':
            count += 1
    return count
input_word = str(input("Enter a string: "))
print("Number of Vowels = ", number_of_vowels(input_word), end='')
```

## Output 1:

```
Enter a string: vOwels are Awesome
Number of Vowels = 8
Process finished with exit code 0
```

## Source Code 2:

```
# Number 2
def check_palindrome(word_string):
    new_word = word_string[::-1]
    value = "Not a Palindrome"
    if new_word == word_string:
        value = "Palindrome"
    return value
input_word = str(input("Enter a string: "))
print(check_palindrome(input_word), end='')
```

## Output 2:

Enter a string: test Palindrome Process finished with exit code 0	Enter a string: tree Not a Palindrome Process finished with exit code 0
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### Source Code 3:

```
# Number 3
def sum_of_numbers(word_string):
    count = 0
    for x in word_string:
        if x.isnumeric():
            count += int(x)
    return count
input_word = str(input("Enter a string: "))
print("Sum of Numbers = ", sum_of_numbers(input_word), end='')
```

### Output 3:

```
Enter a string: I am 19 years old my birthyear is 2000
Sum of Numbers = 12
Process finished with exit code 0
```

### Source Code 4:

```
# Number 4
def number_of_words(word_string):
    count = 0
    for x in word_string.split(' '):
        count += 1
    return count
input_word = str(input("Enter a string: "))
print("Numbers= of Words = ", number_of_words(input_word), end='')
```

### Output 4:

```
Enter a string: Python is so easy but so much in syntax to remember
Numbers= of Words = 11
Process finished with exit code 0
```