19th-august-python-basics

March 20, 2024

Swapping values without a temporary variable:

[9]:
```
x = 5
y = 10

x = x + y
y = x - y
x = x - y

print("After swapping:")
print("x =", x)
print("y =", y)
```

```
After swapping:
x = 10
y = 5
```

Calculating the area of a rectangle:

[ ]:
```
length = float(input("Enter the length of the rectangle: "))
width = float(input("Enter the width of the rectangle: "))

area = length * width

print("The area of the rectangle is:", area)
```

```
Enter the length of the rectangle:  10
Enter the width of the rectangle:  10

The area of the rectangle is: 100.0
```

Converting temperatures from Celsius to Fahrenheit:

[11]:
```
celsius = float(input("Enter temperature in Celsius: "))

fahrenheit = (celsius * 9/5) + 32

print("Temperature in Fahrenheit:", fahrenheit)
```

```
Enter temperature in Celsius:  10
```

```
Temperature in Fahrenheit: 50.0
```

Printing the length of a string:

[12]:
```
string = input("Enter a string: ")

print("Length of the string:", len(string))
```

```
Enter a string:  10
Length of the string: 2
```

Counting vowels in a string:

[13]:
```
sentence = input("Enter a sentence: ")

vowel_count = sum(1 for char in sentence if char.lower() in 'aeiou')

print("Number of vowels in the sentence:", vowel_count)
```

```
Enter a sentence:  hello
Number of vowels in the sentence: 2
```

Reversing a string:

[14]:
```
string = input("Enter a string: ")

reversed_string = string[::-1]

print("Reversed string:", reversed_string)
```

```
Enter a string:  rahman
Reversed string: namhar
```

Checking if a string is a palindrome:

[15]:
```
string = input("Enter a string: ")

if string == string[::-1]:
    print("The string is a palindrome.")
else:
    print("The string is not a palindrome.")
```

```
Enter a string:  raar
The string is a palindrome.
```

Removing spaces from a string

[16]:
```
string = input("Enter a string with spaces: ")
```

```
string_without_spaces = string.replace(" ", "")

print("String without spaces:", string_without_spaces)
```

```
Enter a string with spaces:  r a h mma n
String without spaces: rahmman
```

[ ]: