assignment1

August 19, 2023

```
[3]: '''Q.1. Declare two variables, `x` and `y`, and assign them integer values.␣
      ↪Swap the values of these
     variables without using any temporary variable.'''

     x = 5
     y = 10
     temp = x
     x = y
     y = temp
```

```
[9]: #output
     x
```

```
[9]: 10
```

```
[5]: y
```

```
[5]: 5
```

```
[16]: '''Q.2. Create a program that calculates the area of a rectangle.
      Take the length and width as inputs from the user and store them in variables.
      Calculate and display the area.'''

      l = int(input('Enter the value of length of a rectangle:'))
      w = int(input('Enter the value of width of a rectangle:'))
      l*w
```

```
     Enter the value of length of a rectangle: 8
     Enter the value of width of a rectangle: 3
```

```
[16]: 24
```

```
[28]: '''3. Write a Python program that converts temperatures from Celsius to␣
      ↪Fahrenheit.
      Take the temperature in Celsius as input, store it in a variable,
      convert it to Fahrenheit, and display the result.'''

      c = int(input('Enter the value of celsius:'))
```

```
c*9/5+32
```

Enter the value of celsius: 10

[28]: 50.0

[4]: ```
'''1. Write a Python program that takes a string as input and prints the length
 of the string.'''

a = input("Enter a string: ")
print("Length of the input string is:", len(a))
```

Enter a string:  Samartha

Length of the input string is: 8

[20]: ```
'''2. Create a program that takes a sentence from the user and counts the
 number of vowels (a, e, i, o, u) in the string.'''


string = input('Enter the string:')
vowels = "aeiouAEIOU"

count = sum(string.count(vowel) for vowel in vowels)
print(count)
```

Enter the string: SamarthaMarutiGaikwad

9

[25]: ```
'''3. Given a string, reverse the order of characters using string slicing and
 print the reversed string.'''

s = 'collage'
s[::-1]
```

[25]: 'egalloc'

[31]: ```
'''4. Write a program that takes a string as input and checks if it is a
 palindrome (reads the same forwards and backwards).'''

def isPalindrome(s):
    return s == s[::-1]


# Driver code
s = input('Enter the string')
ans = isPalindrome(s)
```

2

```
if ans:
    print("Yes")
else:
    print("No")
```

Enter the string malayalam

Yes

[32]:
```
'''5. Create a program that takes a string as input and removes all the spaces␣
 ↪from it.
Print the modified string without spaces.'''

h = input('Enter the string:')
h = h.replace(" ","")
print('modified string:' +h)
```

Enter the string: python is self type programming language

modified string:pythonisselftypeprogramminglanguage