Student ID: HT22100004510

Hemant Thapa

Question 1

Compulsory Task 1

Follow these steps:

- Create a new Python file in this folder called **strings.py**
- Declare a variable called hero that contains the value "\$\$\$Superman\$\$\$"
- Use the string manipulation method strip() and print hero so the output is: Superman

Solution 1

In [6]: hero = "\$\$\$Superman\$\$\$" #storing string value "\$\$\$Superman\$\$\$" in variable hero
hero = hero.strip("\$") #strip("\$") for removing dollar symbols
print(hero) #print command for calling store value in variable hero

Superman

Question 2

Compulsory Task 2

Follow these steps:

- Create a new Python file in this folder called replace.py.
- Save the sentence: "The!quick!brown!fox!jumps!over!the!lazy!dog!." as a single string.
- Reprint this sentence as "The quick brown fox jumps over the lazy dog."
 using the replace() function to replace every "!" exclamation mark with a
 blank space.
- Reprint that sentence as: "THE QUICK BROWN FOX JUMPS OVER THE LAZY DOG." using the upper() function
- Print the sentence in reverse.

Solution 2

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In [46]: #storing string value "The!quick!brown!fox!jumps!over!the!lazy!dog!."
    string1 = "The!quick!brown!fox!jumps!over!the!lazy!dog!."

#replacing "!" symbols with space " ", using replace() function and storing in string2 variable
    string2 = string1.replace("!"," " )

#Changing string2 value into Capital Letter with upper() function and storing in string3 variable
    string3 = string2.upper()P

#Reversing the order of string3 value with slice steps backwards and storing in string4 variable
    string4 = string3[::-1]

print("\n",string2)
    print("\n",string3)
    print("\n",string4)
```

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The quick brown fox jumps over the lazy \log . THE QUICK BROWN FOX JUMPS OVER THE LAZY DOG . . GOD YZAL EHT REVO SPMUJ XOF NWORB KCIUQ EHT
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Question 3

Compulsory Task 3

Follow these steps:

- Create a new Python file in this folder called manipulation.py.
- Ask the user to enter a sentence using the input() method. Save the user's response in a variable called str_manip.
- Using this string value, write the code to do the following:
 - Calculate and display the length of *str_manip*.
 - Find the last letter in *str_manip*. Replace every occurrence of this letter in *str_manip* with '@'.
 - e.g. if *str_manip* = "This is a bunch of words", the output would be: "Thi@ i@ a bunch of word@"
 - Print the last 3 characters in *str_manip* backwards.
 - e.g. if str_manip = "This is a bunch of words", the output would be: "sdr".
 - Create a five-letter word that is made up of the first three characters and the last two characters in str_manip.
 - e.g. if *str_manip* = "**Thi**s is a bunch of wor**ds**", the output would be: "Thids".
 - Display each word on a new line.

If you are having any difficulties, please feel free to contact our specialist team **on Discord** for support.

Solution 3

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In [98]: #This is a bunch of words
str_manip = input("Enter a sentence: ") #Str_manip variable has store input() of string "This is a bunch of words"

length_of_string = len(str_manip) #Len() is used to calculate length of string
print("\nlength of string: ",length_of_string,"\n")

str_manip_2 = str_manip.replace("s", "@") #replace() function is used to replace "s" with "@"
print("S replaced by @: ", str_manip_2)

string_manip_index = str_manip[-3:] #slice is used to get last three letter "rds"
string_manip_index2 = string_manip_index[::-1] #reversing of string "rds" to "sdr"
print("\n3 characters in str_manip backwards: ",string_manip_index2)

string_manip_index3 = str_manip[0:3] #slice is used again to get first three letters of string "Thi"
string_manip_index4 = str_manip[-2:] #slice of string "ds" which is last two characters in str_manip
string_concatenation = str(string_manip_index3 + string_manip_index4) #Concatenation of two string and using str() funct
print("\nfive-letter word that is made up of the first three and the last two characters: ",string_concatenation)

Enter a sentence: This is a bunch of words
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```
Enter a sentence: This is a bunch of words

Length of string: 24

S replaced by @: Thi@ i@ a bunch of word@

3 characters in str_manip backwards: sdr

five-letter word that is made up of the first three and the last two characters: Thids
```