IBM Data Analytics

Course 4: Python for Data Science & AI

String Operations

Question 1

Which of the following statements are true?

Strings…

a) are enclosed by single quotation marks only
b) are enclosed by double quotation marks only
c) can include letters, digits, special characters, and spaces
d) can include letters, digits, special characters, but not spaces

Answer 1

Which of the following statements are true?

Strings…

a) are enclosed by single quotation marks only
b) are enclosed by double quotation marks only
c) can include letters, digits, special characters, and spaces
d) can include letters, digits, special characters, but not spaces

Note that strings can be enclosed by both single **and** double quotation marks.

Question 2

Recall that a string can be assigned to a variable.

Consider the string assigned to the variable POPSTAR:

POPSTAR= “DRIZZY DRAKE”

A) Assuming positive index numbers, what are the index numbers of the letters Y and E?

B) What is the result of the input POPSTAR[3] ?

C) What input returns the result “K” ?

D) What is the result of the input POPSTAR[0:6] ?

E) What input returns the result “DRAKE” ?

Answer 2

Recall that a string can be assigned to a variable.

Consider the string assigned to the variable POPSTAR:

POPSTAR= “DRIZZY DRAKE”

A) Y=[5] and E=[11]?

B) “Z”

C) POPSTAR[10]

D) “DRIZZY”

E) POPSTAR[7:12]

Question 3

Recall that a string can be assigned to a variable.

Consider the string assigned to the variable POPSTAR:

POPSTAR= “DRIZZY DRAKE”

A) Assuming negative index numbers, what are the index numbers of the letters Y and I?

B) What is the result of the input POPSTAR[-4] ?

C) What input returns the result ‘A’ ?

D) What input returns the result “RAKE” ?

Answer 3

Recall that a string can be assigned to a variable.

Consider the string assigned to the variable POPSTAR:

POPSTAR= “DRIZZY DRAKE”

A) Y=[-7] and I=[-10]

B) “R”

C) POPSTAR[-3]

D) POPSTAR[-4:0]

Question 4

Consider the string assigned to the variable SUCCESS

SUCCESS= "MAMBA MENTALITY"

A) Assuming positive index numbers, what is the result of the input SUCCESS[::2] ?

B) What is the result of the input SUCCESS[0:10:2] ?

C) What is the result of the input SUCCESS[2:5:2] ?

D) What input returns the result " NL" ? (*notice the space)

E) What input returns the result "A TT" ? (*notice the space)

Answer 4

Consider the string assigned to the variable SUCCESS

SUCCESS= "MAMBA MENTALITY"

A) "MMAMNAIY"

B) "MMAMN"

C) "MA"

D) SUCCESS[5:12:3]

E) SUCCESS[1:14:4]

Question 5

Consider the string assigned to the variable BOOK

BOOK= “HARRY POTTER”

A) What command can you use to determine the length of the string?

B) What is the length of the string?

Answer 5

Consider the string assigned to the variable BOOK

BOOK= “HARRY POTTER”

A) We can use the len() command. Our input would be len(BOOK)

B) The output of len(BOOK) should be 12, as there are 11 letters + 1 space in the string

Question 6

Consider the following variables:

BOOK= "HARRY POTTER"
COMMENT= "IS A BESTSELLER"

A) If we want to create a new string that reads, "HARRY POTTER IS A BESTSELLER" what input would we use?

B) If we want to create a new string that reads, "HARRY POTTER IS A BESTSELLER AND J.K ROWLING IS A GENIUS" what input would we use?

Answer 6

BOOK= “HARRY POTTER”
COMMENT= “IS A BESTSELLER”

A) New_string = BOOK + COMMENT

B) New_string2 = BOOK + COMMENT + “AND J.K ROWLING IS A GENIUS”

Question 7

Consider the following string:

“SALE!”

A) If we want to create a new string that reads, “SALE! SALE! SALE! SALE! SALE! SALE! SALE! SALE! SALE!” what input would we use?

Answer 7

A) 9 * ”SALE!”

Question 8

Consider the following strings:

“NEVER GIVE UP!”

“YOU MUST TRY”

“AGAIN AND”

“UNTIL YOU SUCCEED!”

A) If we want to create a new string that reads, “NEVER GIVE UP! YOU MUST TRY AGAIN AND AGAIN AND AGAIN AND AGAIN AND AGAIN AND AGAIN UNTIL YOU SUCCEED!” what input would we use?

Answer 8

Consider the following strings:

“NEVER GIVE UP!”

“YOU MUST TRY”

“AGAIN AND”

“AGAIN UNTIL YOU SUCCEED!”

A) “NEVER GIVE UP!” + “YOU MUST TRY” + 5 * “AGAIN AND” + “AGAIN UNTIL YOU SUCCEED!”

Question 9

Consider the following:

Siblings= “Middle children have it the worst!”

A) Convert the string to upper case letters and store it in a new variable called Siblings2

Question 9

Consider the following:

Siblings= “Middle children have it the worst!”

A) Siblings2=Siblings.upper()

Question 10

Consider the following:

Siblings= “Middle children have it the worst!”

B) Replace the word ‘worst’ with ‘best’ and store the new string in the variable Siblings3

Answer 10

Siblings= “Middle children have it the worst!”

B) Siblings3 = Siblings.replace(‘worst’, ‘best’)

Question 11

Consider the following:

truth= “We can do anything we set our minds to”

A) Assuming positive index numbers, what is the result of the input truth.find(‘can’) ? What does this result mean?

B) What is the result of the input truth.find(‘minds’) ?

Answer 11

Consider the following:

truth= “We can do anything we set our minds to”

A) 3. This means that the substring ‘can’ can be found beginning at index 3.

B) 30

Question 12

Consider the following:

truth= “We can do anything we set our minds to”

C) What is the result of the input truth.find(‘believe’) ?

Answer 12

C) -1

Question 13

If we want to print the following text, what input would be run?

JENNIFER LOPEZ
IS AN AWESOME DANCER!

Answer 13

If we want to print the following text, what input would be run?

print(“JENNIFER LOPEZ \n IS AN AWESOME DANCER!”)

Question 14

If we want to print the following text, what input would be run?

colour ---> purple

Answer 14

If we want to print the following text, what input would be run?

print(“colour ---> \t purple”)

Question 15

If we want to print the following text, what input would be run?

The backslash \ is so cool

Answer 15

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print("The backslash \\ is so cool")
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OR

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print(r"The backslash \ is so cool")
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