

STRINGS IN PYTHON

Strings in python are surrounded by either single quotation marks, or double quotation marks.

'hello' is the same as "hello".

You can display a string literal with the print() function:

Assign String to a Variable

Assigning a string to a variable is done with the variable name followed by an equal sign and the string:

Slicing

You can return a range of characters by using the slice syntax.

Specify the start index and the end index, separated by a colon, to return a part of the string

Slice From the Start

By leaving out the start index, the range will start at the first character:

Slice To the End

By leaving out the end index, the range will go to the end:

Negative Indexing

Use negative indexes to start the slice from the end of the string: String Concatenation

To concatenate, or combine, two strings you can use the + operator.

PRACTICE QUESTIONS:

```
#create a string
print("Create a String")
a = "Hello World"
print(a)
print("\n")

#inbuilt function in string
#length function
print("Length Function")
```

```
print(len(a))
print("\n")

#minimum and maximum function
print("Minimum and Maximum Function")
print(min(a))
print(max(a))
print("\n")

#string concatenation
print("String Concatenation")
b = "Hello"
c = "World"
print(b+c)
print("\n")

#operators on string
print("Operators on String")
print(b*3)
print("\n")

#string slicing
print("String Slicing")
print(a[0:5])
print("\n")
```

Output:

```
Create a String
Hello World
```

```
Length Function
11
```

```
Minimum and Maximum Function

r
```

```
String Concatenation
HelloWorld
```

```
Operators on String
HelloHelloHello
```

```
String Slicing
Hello
```

```
#string comparison
print("String Comparison")
d = "Hello"
e = "World"
print(d==e)
print(d<e)
print(d>e)
print("\n")

#string formatting operator
print("String Formatting operator")
print("my name is %s and i am %d years old"%("AMAN",19))
```

Output:

```
String Comparison
False
True
False
```

```
String Formatting operator
my name is AMAN and i am 19 years old
```

```
#string functions and methods
print("Converting String functions")
str = input("Enter the string: ")
print("String in upper case:",str.upper())
print("String in lower case:",str.lower())
print("String in title case:",str.title())
print("String Capitalized:",str.capitalize())
print("String swapcase:",str.swapcase())
```

Output:

```
Converting String functions
Enter the string: HeLlo guyS!
String in upper case: HELLO GUYS!
String in lower case: hello guys!
String in title case: Hello Guys!
String Capitalized: Hello guys!
String swapcase: hELLO GUYS!
```

```
#formatting String functions
print("Formatting string functions")
a = input("Enter the string: ")
print("Center alignmnet:",a.center(50))
print("Left alignment",a.ljust(50))
print("Right alignment",a.rjust(50))
```

Output:

```
Formatting string functions
Enter the string: welcome
Center alignmnet:                welcome
Left alignment welcome
Right alignment                welcome
```

```
#removing white space character
print("Removing white space character")
a = input("Enter the string: ")
print("Left and Rght Space Trim:",a.strip())
print("Right Space Trim:",a.rstrip())
print("Left Space Trim:",a.lstrip())
```

Output:

```
Removing white space character
Enter the string:           welcome to the world
Left Space Trim: welcome to the world
Right Space Trim:           welcome to the world
Left Space Trim: welcome to the world
```

```
#testing string and character
print("Testing string")
i = input("Enter the string:")
print("Aplhanumeric:",i.isalnum())
print("Alphabetic:",i.isalpha())
print("Decimal:",i.isdecimal())
print("Digit:",i.isdigit())
print("Lowercase:",i.islower())
print("Upper:",i.isupper())
```

Output:

```
Testing string
Enter the string:aman
Aplhanumeric: True
Alphabetic: True
Decimal: False
Digit: False
Lowercase: True
Upper: False
```

```
#searching for sub string
print("Searching for sub string")
s = input("Enter the string:")
print("Is string ends with World:",s.endswith("World"))
print("Is string starts with Hello:",s.startswith("Hello"))
print("Count of l:",s.count("l"))
print("Find:",s.find("World"))
```

Output:

```
Searching for sub string
Enter the string:Hello World
Is string ends with World: True
Is string starts with Hello: True
Count of l: 3
Find: 6
```