Exercise 9: Strings [01/10/2019]

Strings

Create a string of your choice.

Iterate over the string and display its elements.

Iterate over the string and display its elements along with the index of the string.

Concatenate two strings

Concatenate four strings

Concatenate a string with a number.

Multiply a string with a string.

Convert a number, list, tuple into string.

Print a raw string.

Print a Unicode string.

Demonstrate that a string is immutable.

Print the character of the string available at index 0 and index 3.

Delete a string

Slice operations

Perform various slicing operations on a string

str = "The Maharaja Sayajirao University of Baroda, Vadodara"

str

str[6]

str[-2]

str[-10]

str[0:6]

str[1:6]

str[6:10]

str[:]

str[::]

str[::-1]
str[:10]
str[::2]
str[0::1]
str[2:13:4]

in and not in operators
--
check whether Univ, Guj is there or not in the previous string.

Comparing strings
--
Perform comparison of two strings using various comparison operators.

Demonstrate the use of various functons on a string.
len()
min()
max()

Demonstrate the use of methods on a string.
capitalize() Converts first character to Capital Letter
center() Pads string with specified character
casefold() converts to casefolded strings
count() returns occurrences of substring in string
endswith() Checks if String Ends with the Specified Suffix
encode() returns encoded string of given string
find() Returns the index of first occurrence of substring
format() formats string into nicer output
index() Returns Index of Substring

isalnum() Checks Alphanumeric Character

isalpha() Checks if All Characters are Alphabets

isdecimal() Checks Decimal Characters

isdigit() Checks Digit Characters

isidentifier() Checks for Valid Identifier

islower() Checks if all Alphabets in a String are Lowercase

isnumeric() Checks Numeric Characters

isprintable() Checks Printable Character

isspace() Checks Whitespace Characters

istitle() Checks for Titlecased String

isupper() returns if all characters are uppercase characters

join() Returns a Concatenated String

ljust() returns left-justified string of given width

rjust() returns right-justified string of given width

lower() returns lowercased string

upper() returns uppercased string

swapcase() swap uppercase characters to lowercase; vice versa

lstrip() Removes Leading Characters

rstrip() Removes Trailing Characters

strip() Removes Both Leading and Trailing Characters

replace() Replaces Substring Inside

rfind() Returns the Highest Index of Substring

rindex() Returns Highest Index of Substring

split() Splits String from Left

rsplit() Splits String From Right

startswith() Checks if String Starts with the Specified String

title() Returns a Title Cased String

zfill() Returns a Copy of The String Padded With Zeros

Write a program to print following pattern

&
&&
&&&
&&&&
&&&&&

```
for i in range(1,6):
    print(i*'@')
```

Write a program to print following patern

*****
****
***
**
*

```
for i in range(5,0,-1):
    print(i*'@')
```

Write a program to print following pattern

*
**
***
****
*****
****
***
**
*

```
for i in range(1,6):
    print(i*'@')
for i in range(4,0,-1):
    print(i*'@')
```

Redo above by taking user input for the charater to print and no of times

Redo all the above program, using while loop

Write a program to demonstrate the working of following methods on a string.
Write a program to demonstrate the working of following functions on a string.
len()
min()
max()
Slice a string as per follow

```
# Get first character of a string
a = "Hello, World!"
print(a[1])
# Get the characters from position 2 to 5
b = "Hello, World!"
print(b[2:5])
#Reverse a string
a="Krishna"
print(a[::-1])
# Length of String
a = "Hello, World!"
print(len(a))
# In Lower case
a = "Hello, World!"
print(a.lower())
```

```
a = "Hello, World!"
print(a.upper())
# Upper Case
a = "Hello, World!"
print(a.upper())
```