|  |  |
| --- | --- |
| **Ex. No. 7**  **Date:09.06.2021** | **STRINGS – LEVEL 1** |

**AIM:**

To write Python programs using strings concept.

**PROGRAMMING BASE:**

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

**I. Assign String to a Variable**

Str =”Hello”

**II. String Methods**

|  |  |
| --- | --- |
| **Method** | **Description** |
| capitalize() | Converts the first character to upper case |
| count() | Returns the number of times a specified value occurs in a string |
| endswith() | Returns true if the string ends with the specified value |
| find() | Searches the string for a specified value and returns the position of where it was found |
| format() | Formats specified values in a string |
| index() | Searches the string for a specified value and returns the position of where it was found |
| isalnum() | Returns True if all characters in the string are alphanumeric |
| isalpha() | Returns True if all characters in the string are in the alphabet |
| isdecimal() | Returns True if all characters in the string are decimals |
| isdigit() | Returns True if all characters in the string are digits |
| isidentifier() | Returns True if the string is an identifier |
| islower() | Returns True if all characters in the string are lower case |
| isnumeric() | Returns True if all characters in the string are numeric |
| isspace() | Returns True if all characters in the string are whitespaces |
| istitle() | Returns True if the string follows the rules of a title |
| isupper() | Returns True if all characters in the string are upper case |
| join() | Joins the elements of an iterable to the end of the string |
| lower() | Converts a string into lower case |
| replace() | Returns a string where a specified value is replaced with a specified value |
| title() | Converts the first character of each word to upper case |
| translate() | Returns a translated string |
| upper() | Converts a string into upper case |

**PROGRAMS:**

**a) Find the ASCII value of a character**

**Description:**

Do not use the in-built function.

Sample Input:

A

Sample Output:

65

Sample Input:

a

Sample Output:

97

**Program:**

‘’’Name: R.sridevi

Roll.no:20UIT021

Program name: To find the ASCII value of charcter.’’’

#to get the input

char=input()

for i in range(65,91):

if((chr(i)==char)):

print(i)

break

else:

i+=32

if(chr(i)==char):

print(i)

break

**Test Cases:**

|  |  |  |
| --- | --- | --- |
| **Test Case No.** | **Input** | **Expected Output** |
| 1 | A | 65 |
| 2 | A | 97 |
| **Total Test Cases** | | **2** |
| **Number of Test Cases Passed** | | **2** |

**b) Sort strings in alphabetical order**

**Description:**

Do not use in-built function.

Sample Input:

3

John

Eve

Smith

Sample Output:

Eve

John

Smith

Sample Input:

-8

Sample Output:

Please give positive number

Sample Inout:

0

Sample Output:

Sorry no data

**Program:**

‘’’Name: R.sridevi

Roll.no: 20UIT021

Program name: To check if a string contains any special character.’’’

#to get the input

num=int(input())

if num<0:

print('Please give positive number')

elif num==0:

print('Sorry no data')

else:

name=[]

for i in range(num):

name.append(input())

length=len(name)

for i in range(length):

for j in range(i,length):

if name[i]>name[j]:

name[i],name[j]=name[j],name[i]

print(name[i])

**Test Cases:**

|  |  |  |
| --- | --- | --- |
| **Test Case No.** | **Input** | **Expected Output** |
| 1 | 3  John  Eve  Smith | Eve  John  Smith |
| 2 | -8 | Please give positive number |
| 3 | 0 | Sorry no data |
| **Total Test Cases** | | **3** |
| **Number of Test Cases Passed** | | **3** |

**RESULT:**

Thus, the Python programs are executed successfully.