

SSN COLLEGE OF ENGINEERING

(Autonomous - Affiliated to Anna University)

DEPARTMENT OF CSE

UGE2197 PROGRAMMING IN PYTHON LABORATORY

Ex 5: Python Programming using Strings

Part – A (Mandatory)

1. What will be output of the following string operations

Mysubj = "Computer Science"

- a) `print(Mysubj[0:len(Mysubj)])`
- b) `print(Mysubj[len(Mysubj)-1])`
- c) `print(2* Mysubj)`
- d) `print(Mysubj[::-2])`
- e) `print(Mysubj[:3] + Mysubj[3:])`
- f) `print(Mysubj.swapcase())`
- g) `print(Mysubj.startswith('Comp'))`
- h) `print(Mysubj.isalpha())`
- i) `print(Mysubj.upper())`
- j) `print(Mysubj.count('put'))`
- k) `print(Mysubj.find('Sci'))`
- l) `print(Mysubj.index('Science'))`
- m) `print(Mysubj.replace('Engineering','Science'))`
- n) `print(Mysubj.split(' '))`

2. Print the output of the following :

Str = "String Slicing in Python"

```
print(Str[13:18])
print(Str[-2:-4:-2])
print(Str[12:8:2])
print(Str[-17:-1:1])
print(Str[-6:-20:-2])
print(Str[0:9:3])
print(Str[19:29])
print(Str[-6:-9:-3])
print(Str[-9:-0:-1])
print(Str[2:16:3])
```

3. Write a Python program to calculate the length of a string and to print the index of the character in a string without library function

4. Write a Python program to count the number of occurrences of a substring in a given string and print the starting index of the substring for each occurrence. If the substring is not found in the given string return 'Not found'.

5. Write a Python program to check whether a given string is a palindrome or not.

6. Write a Python program to count Uppercase, Lowercase, special character and numeric values in a given string.

7. Write a Python program to sort a string lexicographically without library function (i/p: section1, o/p:1ceinost)

8. Write a Python program to delete all occurrences of a specified character in a given string without using in built functions.

9. Write a menu driven program to perform the following using inbuilt functions:

- a. First occurrence of a substring from the end.
- b. Right justify a string.
- c. Capitalize the first letter of a string.
- d. Check whether the string is alphanumeric.
- e. Partition the given text into three parts

Part – B (Optional)

1. Write a python program that replaces all the vowels in the string with '*'
 2. Write a Python program to replace each character of a word of length five and more with hash character (#)
 3. Write a program that takes user's name and PAN card number. Validate the information using string functions
 4. Write a Python program to parse an email id to print from which email server it was sent
 5. Write a python program that reads a sentence, where each word is separated by a space. The program should replace each blank with a hyphen
 6. Write a Python program to strip a set of characters from a string
- Encrypt a given message by "rotating" each letter by a fixed number of places. To rotate a letter means to shift it through the alphabet, wrapping around to the beginning if necessary, so 'A' rotated by 3 is 'D' and 'Z' rotated by 1 is 'A'. Write a function called rotate_word that takes a string and an integer as parameters, and returns a new string that contains the letters from the original string rotated by the given amount. E.g Given String: HAL Encrypted String: JCN (Rotated by 2)
