

# string\_manipulation

June 12, 2021

## 1 String Manipulation

### 1.1 String loops

```
[2]: fruit = 'banana'
      index=0
      while index< len(fruit):
          letter = fruit [index]
          print (index, letter)
          index=index+1
```

```
0 b
1 a
2 n
3 a
4 n
5 a
```

### 1.2 String Slicing

```
[3]: s="Welcome to Higher Colleges of Technology"
      print (s[0:4]) #first 4 letters
      print (s[6:7]) #starting from 6th to 7th
      print (s[6:20]) #starting from 6th to 20th
      print (s[:12]) #first 12 letters
      print (s[2:]) #all after 2nd letter
      print (s [:]) #everything
      print (s)      #everything
```

```
Welc
e
e to Higher Co
Welcome to H
lcome to Higher Colleges of Technology
Welcome to Higher Colleges of Technology
Welcome to Higher Colleges of Technology
```

### 1.3 String conversion

```
[4]: str3 = '123'
      str3= int (str3)+1
      print (str3)
```

124

## 1.4 String functions and methods

```
[13]: var1 = ' Higher Colleges of Technology '
var2 = 'College'
var3 = 'g'
print (var1.upper()) #capitalize
print (var1.lower()) #to lower case
print (len(var1)) #length of string
print (var1.count(var3) ) # find how many g letters in var1
print (var1.endswith(' '))
print (var1.startswith('0'))
print (var1.find('h', 0, 29))
print (var1.lstrip()) # It removes all leading whitespace of a string in var1
print (var1.rstrip()) # It removes all trailing whitespace of a string in var1
print (var1.strip()) # It removes all leading and trailing whitespace
print ('\n') #empty line
print (var1.replace('Colleges', 'University')) #replaces the word
```

```
HIGHER COLLEGES OF TECHNOLOGY
higher colleges of technology
31
3
True
False
4
Higher Colleges of Technology
Higher Colleges of Technology
Higher Colleges of Technology
```

Higher University of Technology

## 1.5 Parsing and Extracting strings

```
[15]: Maindata = 'From ossama.embarak@hct.ac.ae Sunday Jan 4 09:30:50 2017'
      atpost = Maindata.find('@') #first occurence of @
      print ("\n<<<<<<<<<<>>>>>>>>>")
      print (atpost)#firt 19 chracters
      print (Maindata[:atpost]) #create and print array of first 19
      data = Maindata[:atpost]
```

```
name=data.split(' ')
print (name)
print (name[1].replace('.', ' ').upper())
print ("\n<<<<<<<<<<>>>>>>>>>>")
```

<<<<<<<<<<<<<>>>>>>>>>>>>

19

From ossama.embarak

```
['From', 'ossama.embarak']
```

OSSAMA EMBARAK

[illegible]