Task 2 Practice session

1. Single line comments

In [3]:
```
Name= "My name is Raviteja Beri"
Name
```

Out[3]: 'My name is Raviteja Beri'

In [5]:
```
len(Name)
```

Out[5]: 24

In [7]:
```
type(Name)
```

Out[7]: str

In [9]:
```
Name[13:25]
```

Out[9]: 'viteja Beri'

In [68]:
```
Name = """My name is Raviteja
          currently I have enrolled into DSAIML Course"""
print(Name)
```

```
My name is Raviteja
          currently I have enrolled into DSAIML Course
```

2. String Concatenation

In [12]:
```
Name[11:25]
```

Out[12]: 'Raviteja Beri'

In [14]:
```
Name[20:25]
```

Out[14]: 'Beri'

In [28]:
```
Name1 = "My name is Raviteja "
Name2 = "currently I have enrolled into DSAIML Course."
Name3 = "and "
print(Name1 + Name3 + Name2)
```

```
My name is Raviteja and currently I have enrolled into DSAIML Course.
```

In [36]:
```
len(Name1 + Name2 + Name3)
```

Out[36]: 69

In [38]:
```
len(Name2)
```

Out[38]: 45

In [52]:
```
Name = "Raviteja"
Name
```

Out[52]: 'Raviteja'

In [58]:
```
len(Name)
```

Out[58]: 8

3. Unpacking Characters

In [66]:
```
a,b,c,d,e,f,g,h = Name
print(a)
print(b)
print(c)
print(d)
print(e)
print(f)
print(g)
print(h)
```

```
R
a
v
i
t
e
j
a
```

4. Forward Indexing & Backward Indexing

In [76]:
```
name="Raviteja"
name
```

Out[76]: 'Raviteja'

In [78]:
```
name[0]
```

Out[78]: 'R'

In [80]:
```
name[-1]
```

Out[80]: 'a'

In [82]:
```
name[-6]
```

Out[82]: 'v'

In [84]:
```
name[6]
```

Out[84]:
```
'j'
```

5. Python Slicing & Skipping Character

In [88]:
```
Name="Raviteja"
Name
```

Out[88]:
```
'Raviteja'
```

In [90]:
```
Name[4:8]
```

Out[90]:
```
'teja'
```

In [92]:
```
Name[0:4]
```

Out[92]:
```
'Ravi'
```

In [97]:
```
Name[4:8:2]
```

Out[97]:
```
'tj'
```

In [107…
```
Name[0:8:2]
```

Out[107…
```
'Rvtj'
```

In [109…
```
Name
```

Out[109…
```
'Raviteja'
```

In [115…
```
Name[2:8:1]
```

Out[115…
```
'viteja'
```

In [117…
```
Name[4:8] + Name[2:4]
```

Out[117…
```
'tejavi'
```

6. Escape Sequence

In [134…
```
print('My name is Raviteja and currently I have enrolled into DSAIML Course.\nDo
```

```
My name is Raviteja and currently I have enrolled into DSAIML Course.
Do You ?
```

In [142…
```
print('The Course contents are Python\tSQL\tSattistics\tDeepLearning\tMachineLea
```

```
The Course contents are Python  SQL     Sattistics      DeepLearning    MachineLe
arning  LLMs    GenAI   AgenticAI
It was Wonderful Course
Enroll now, Dont neglect it!
```

7. String Methods

1. Capitalize()= Converts the first character the string to Capital Letter.

In [146…
```
S1="My name is Raviteja and currently I have enrolled into DSAIML Course."
print(S1.capitalize())
```

```
My name is raviteja and currently i have enrolled into dsaiml course.
```

2. Count()= returns occurrences of substring in string, count(substring, start=.., end=..)

In [150…
```
print(S1.count("i"))
```

```
3
```

In [152…
```
print(S1.count("a"))
```

```
5
```

3. endswith()= Checks if a string ends with a specified ending

In [182…
```
S1= "Full stack DataScience and AIML with python and 6months duration"
print(S1.endswith("on"))
```

```
True
```

In [157…
```
print(S1.endswith("ion"))
```

```
True
```

In [159…
```
print(S1.endswith("tion"))
```

```
True
```

In [161…
```
print(S1.endswith("htion"))
```

```
False
```

4. expandtabs()= Replaces tab character with spaces, default tab size is 8. It takes tab size argument.

In [185…
```
Text="My\tname\tis\traviteja"
print(Text.expandtabs())
```

```
My      name    is      raviteja
```

In [174…
```
print(Text.expandtabs(5))
```

```
My   name is   raviteja
```

In [176…
```
print(Text.expandtabs(0))
```

```
Mynameisraviteja
```

In [178…
```
print(Text.expandtabs(1))
```

```
My name is raviteja
```

5. find(): Returns the index of first occurrence of substring

In [190…
```
t1= "Full stack DataScience and AIML with python and 6months duration"
print(t1.find("k"))
```

```
9
```

In [192…
```
print(t1.find("on"))
```

```
41
```

6. format()= formats string into nicer output.

In [201…
```
Name="Raviteja Beri"
Education="B.Tech Grad in the ECE stream"
State="Telangana"
Country="India"
sentence= 'I am {} and I am a {}. I live in the state {}, {}.'.format(Name, Educ
print(sentence)
```

```
I am Raviteja Beri and I am a B.Tech Grad in the ECE stream. I live in the state
Telangana, India.
```

In [205…
```
radius = 10
pi = 3.14
area = pi
result = 'The area of circle with {} is {}'.format(radius, area)
print(result)
```

```
The area of circle with 10 is 3.14
```

7. index()= Returns the index of substring

In [217…
```
N1= 'My name is Raviteja'
print(N1.index('i'))
```

```
8
```

8. isalnum()= Checks alphanumeric character

In [228…
```
N1='MynameisRavitejaandmyageistwentythree'
print(N1.isalnum())
```

```
True
```

In [230…
```
N1='My name is Raviteja and my age is twenty three'
print(N1.isalnum())
```

```
False
```

In [232…
```
N1='My name is Raviteja and my age is 23'
print(N1.isalnum()) # spaces are not recognized neither alphabets or numeric val
```

```
False
```

9. isalpha()= Checks if all characters are alphabets

In [241…
```
P1= 'My name is Raviteja'
print(P1.isalpha())
```
```
False
```

In [243…
```
P1= 'Raviteja'
print(P1.isalpha())
```
```
True
```

In [245…
```
P1= '22248'
print(P1.isalpha())
```
```
False
```

10. isdecimal= Checks Decimal Characters

In [248…
```
N1='100'
print(N1.isdecimal())
```
```
True
```

In [250…
```
N1='100.01'
print(N1.isdecimal())
```
```
False
```

11. isdigit()= Checks Digit Characters

In [253…
```
N1='100'
print(N1.isdigit())
```
```
True
```

In [255…
```
N1='Hundred'
print(N1.isdigit())
```
```
False
```

12. isidentifier()= Checks for valid identifier means it check if a string is a valid variable name

In [258…
```
N2='23Raviteja'
print(N2.isidentifier())
```
```
False
```

In [260…
```
N2='Raviteja'
print(N2.isidentifier())
```
```
True
```

In [262…
```
N2='_Raviteja_'
print(N2.isidentifier())
```
```
True
```

In [264…
```
N2='_23_Raviteja_'
print(N2.isidentifier())
```

```
True
```

In [268…
```
N2='-23Raviteja'
print(N2.isidentifier())
```

```
False
```

In [272…
```
N2='$23Raviteja'
print(N2.isidentifier())
```

```
False
```

13. [a] islower()= Checks if all alphabets in a string are lowercase. [b] isupper()= returns if all characters are uppercase characters.

In [275…
```
N3='My name is Raviteja'
print(N3.islower())
```

```
False
```

In [277…
```
N3='my name is raviteja'
print(N3.islower())
```

```
True
```

In [280…
```
N3='My name is Raviteja'
print(N3.isupper())
```

```
False
```

In [282…
```
N3='MY NAME IS RAVITEJA'
print(N3.isupper())
```

```
True
```

14. isnumeric()= Checks numeric characters

In [288…
```
num='25'
print(num.isnumeric())
```

```
True
```

In [290…
```
num='twenty'
print(num.isnumeric())
```

```
False
```

15. join()= Returns a concatenated string.

In [319…
```
name=['Python','SQL','Statistics','ML','DL','GEN AI','AGENTIC AI']
output=', #'.join(name)
print(output) # to get the hash symbol at python use this ['#'+', #'.join(name)]
```

```
Python, #SQL, #Statistics, #ML, #DL, #GEN AI, #AGENTIC AI
```

16. strip()= Removes both leading and trailing characters.

In [330…
```
name='My name is Raviteja'
print(name.strip('a'))
```

```
My name is Ravitej
```

In [332…
```
name='    My name is Raviteja     '
print(name.strip())
```

```
My name is Raviteja
```

In [334…
```
name='wwwwwwMy name is Ravitejawwwwww'
print(name.strip('w'))
```

```
My name is Raviteja
```

In [338…
```
name='wwwwwwMy name is Ravitejawwwwww'
print(name.lstrip('w')) # removes values from left side
```

```
My name is Ravitejawwwwww
```

In [340…
```
name='wwwwwwMy name is Ravitejawwwwww'
print(name.rstrip('w')) # removes values from right side
```

```
wwwwwwMy name is Raviteja
```

17. replace()= Replaces substring inside with other.

In [343…
```
name='My name is Raviteja'
print(name.replace('Raviteja','Teja'))
```

```
My name is Teja
```

In [345…
```
name='My roll number is 410'
print(name.replace('410','406'))
```

```
My roll number is 406
```

In [347…
```
print(name.replace('roll number', 'college ID'))
```

```
My college ID is 410
```

18. split()= Splits String from Left into each word

In [350…
```
name='My name is Raviteja'
print(name.split())
```

```
['My', 'name', 'is', 'Raviteja']
```

19. title()= Returns a Title Cased String

In [353…
```
name='My name is Raviteja'
print(name.title()) # it converts lowercase letter of each word to uppercase
```

```
My Name Is Raviteja
```

20. swapcase()= Checks if String Starts with the Specified String

In [356…
```
name='Raviteja Beri'
print(name.swapcase())
```

```
rAVITEJA bERI
```

In [358…
```
name='raviteja beri'
print(name.swapcase())
```

```
RAVITEJA BERI
```

In [360…
```
name='raviTEJA beri'
print(name.swapcase())
```

```
RAVIteja BERI
```

21. startswith()= Checks if String Starts with the Specified String.

In [363…
```
name='Raviteja Beri'
print(name.startswith('Ravi'))
```

```
True
```

In [365…
```
name='Raviteja Beri'
print(name.startswith('teja'))
```

```
False
```

In [367…
```
name='Raviteja Beri'
print(name.startswith('Ramu'))
```

```
False
```

The End