Python comments

Types of comments

1. Single line comment
2. Multi line comments

Single line comments

With the help of single line comments to display the title of the page.
---> A single line comment denoted as the symbol as #

Syntax:
#title of the page corresponding to markdown format

Multi line comments

---> A multi line comment to display the multiple lines of title to display the markdown format only.
Syntax(type 1) :
'''----------
----------'''
Syntax(type 2):
"""----------
----------"""

In [11]:

```
# this is a single line comment
```

''' This is a multi line comment which can be written in multiple line this is the first type of syntax'''

""" This is a multi line comment which can be written in multiple line this is the second type of syntax"""

Def of Python

*Python is a most popular programming language

* Server to create the web applications

* It can be used for network transcations

* python can be used to system scripting

* python can be used to connect the remote servers

* python can be used to connect the database to realtime operations

'''My self koteswararao studying in RVRJC. I am studying MBA in this college.'''

'''తెలుగు అనేది ద్రావిడ భాషల కుటుంబానికి చెందిన భాష. దీనిని మాట్లాడే ప్రజలు ప్రధానంగా ఆంధ్ర, తెలంగాణాలో ఉన్నారు. ఇది ఆ రాష్ట్రాలలో అధికార భాష. భారతదేశంలో ఒకటి కంటే ఎక్కువ రాష్ట్రాల్లో ప్రాథమిక అధికారిక భాషా హోదా కలిగిన కొద్ది భాషలలో హిందీ, బెంగాలీలతో పాటు ఇది కూడా ఉంది.పుదుచ్చేరిలోని యానం జిల్లాలో తెలుగు అధికారిక భాష. ఒడిశా, కర్ణాటక, తమిళనాడు, కేరళ, పంజాబ్, ఛత్తీగఢ్, మహారాష్ట్ర, అండమాన్ నికోబార్ దీవులలో గుర్తింపబడిన అల్పసంఖ్యాక భాష. దేశ ప్రభుత్వం భారతదేశ ప్రాచీన భాషగా గుర్తించిన ఆరు భాషలలో ఇది ఒకటి.'''

Python Datatypes

**integer- int()

--->It holds the integer values

**string-str()

--->It holds the string values

**Float-float()

--->It holds the floating type of data values

In [17]:

```
a=10
print(a)
type(a)
```

```
10
```

Out[17]:

```
int
```

In [19]:

```
b=18.52
print(b)
type(b)
```

```
18.52
```

Out[19]:

```
float
```

In [22]:

```
c="ram"
print(c)
type(c)
```

```
ram
```

Out[22]:

```
str
```

In [24]:

```
# convert the integer to string
m=1234
n=str(m)
print(n)
type(n)
```

```
1234
```

Out[24]:

```
str
```

In [25]:

```
# convert integer to float
m=9865
n=float(m)
print(n)
type(n)
```

```
9865.0
```

Out[25]:

```
float
```

In [28]:

```
# convert float to integer
m=9865.32
n=int(m)
print(n)
type(n)
```

```
9865
```

Out[28]:

```
int
```

Note: string cannot be converted into integer and float datatypes

In [26]:

```
#convert string to integer
m="ram"
n=int(m)
print(n)
type(n)
```

```
---------------------------------------------------------------------------
ValueError                                Traceback (most recent call last)
<ipython-input-26-6db6bd6742fb> in <module>
      1 #convert string to integer
      2 m="ram"
----> 3 n=int(m)
      4 print(n)
      5 type(n)

ValueError: invalid literal for int() with base 10: 'ram'
```

In [27]:

```
#convert string to float
m="ram"
n=float(m)
print(n)
type(n)
```

```
---------------------------------------------------------------------------
ValueError                                Traceback (most recent call last)
<ipython-input-27-5659572e0636> in <module>
      1 #convert string to float
      2 m="ram"
----> 3 n=float(m)
      4 print(n)
      5 type(n)

ValueError: could not convert string to float: 'ram'
```

key words in python

In [29]:

```
# keywords
import keyword
print(keyword.kwlist)
```

```
['False', 'None', 'True', 'and', 'as', 'assert', 'async', 'await', 'break',
'class', 'continue', 'def', 'del', 'elif', 'else', 'except', 'finally', 'fo
r', 'from', 'global', 'if', 'import', 'in', 'is', 'lambda', 'nonlocal', 'no
t', 'or', 'pass', 'raise', 'return', 'try', 'while', 'with', 'yield']
```

Keywords are some predefined and reserved words in python that have special meanings. keywords are used to define the syntax of the coding. The keyword cannot be used as an identifier,function and variable name. All the keywords in python are written in lower case except True and False. There are 33 keywords in python 3.7 lets ga through all of them one by one.

Keyword Description

1. and--A logical operator
2. as--To create an alias
3. assert--For debugging
4. break--To break out of a loop
5. class--To define a class
6. continue--To continue to the next iteration of a loop
7. def--To define a function
8. de--To delete an object
9. elif--Used in conditional statements, same as else if
10. else--Used in conditional statements
11. except--Used with exceptions, what to do when an exception occurs
12. False--Boolean value, result of comparison operations
13. finally--Used with exceptions, a block of code that will be executed no matter if there is an exception or not
14. for--To create a for loop
15. from--To import specific parts of a module
16. global--To declare a global variable
17. if--To make a conditional statement
18. import--To import a module
19. in--To check if a value is present in a list, tuple, etc.
20. is--To test if two variables are equal
21. lambda--To create an anonymous function
22. None--Represents a null value
23. nonlocal--To declare a non-local variable
24. not--A logical operator
25. or--A logical operator
26. pass--A null statement, a statement that will do nothing
27. raise--To raise an exception
28. return--To exit a function and return a value
29. True--Boolean value, result of comparison operations
30. try--To make a try...except statement
31. while--To create a while loop
32. with--Used to simplify exception handling
33. yield--To end a function, returns a generator

Control statements

In [30]:

```
s="Hello world !"
s1=s.split()
print(s1)
```

```
['Hello', 'world', '!']
```

1. Write a program to find the biggest of two numbers

2. write a program to check the given number is even or not

3. Write a program to check the given age is eligible for vote or not

program to find the biggest of two numbers:

To find the biggest number and print its value

In [81]:

```
n1=int(input("Enter n1 value..."))
n2=int(input("Enter n2 value..."))
if(n1>n2):
    print(n1,"is greater value")
else:
    print(n2,"is greater value")
```

```
Enter n1 value...30
Enter n2 value...20
30 is greater value
```

To find the biggest number and print its variable only

In [36]:

```
a=40
b=50
if(a>b):
    print("A is big")
if(b>a):
    print("B is big")
```

```
B is big
```

In [38]:

```
a=int(input("Enter the first number"))
b=int(input("Enter the second number"))
if(a>b):
    print("A is big")
if(b>a):
    print("B is big")
```

```
Enter the first number10
Enter the second number20
B is big
```

other process

In [48]:

```
a=int(input("Enter the first number"))
b=int(input("Enter the second number"))
if(a>b):
    print("A is big")
else:
    print("B is big")
```

```
Enter the first number20
Enter the second number60
B is big
```

Program to check the given number is even or not

In [47]:

```
x=50
if(x%2==0):
    print("X is even")
else:
    print("X is not even")
```

```
X is even
```

In [89]:

```
y=int(input("Enter your number:  "))
if(y%2==0):
    print("Y is even")
else:
    print("Y is not even")
```

```
Enter your number:  21
Y is not even
```

program to find whether a number is even or not and print its value

In [94]:

```
z=int(input("Enter your number:  "))
if(z%2==0):
    print(z," is even")
else:
    print(z," is not even")
```

```
Enter your number:  60
60  is even
```

program to check the given age is eligible for vote or not

In [51]:

```
age=22
if(age>=18):
    print("You are eligible to vote")
else:
    print("You are not eligible to vote")
```

```
You are eligible to vote
```

In [83]:

```
age=int(input("Enter your age:   "))
b="years"
print(age,b)
if(age>=18):
    print("You are eligible to vote")
else:
    print("You are not eligible to vote")
```

```
Enter your age:   20
20 years
You are eligible to vote
```

program to find the biggest of two numbers(float)

In [84]:

```
a=float(input("Enter first number"))
b=float(input("Enter second number"))
if(a>b):
    print(a,"is greater")
else:
    print(b,"is greater")
```

```
Enter first number10.22
Enter second number10.21
10.22 is greater
```

Concatination of a variable/strings

In [86]:

```
print("hai"+"12345")
```

```
hai12345
```

In [87]:

```
print("hai",12345)
```

```
hai 12345
```

In [88]:

```
print("12"+"12")
```

```
1212
```

elif

To check two or more conditions

In [65]:

```
a=int(input("Enter first number:  "))
b=int(input("Enter second number:  "))
c=int(input("Enter third number:  "))
d=int(input("Enter fourth number:  "))
if(a>b and a>c and a>d):
    print(a,"is big")
elif(b>c and b>d):
    print(b,"is big")
elif(c>d):
    print(c,"is big")
else:
    print(d,"is big")
```

```
Enter first number:  54454
Enter second number:  564564
Enter third number:  5454
Enter fourth number:  5245
564564 is big
```

To check the given character is vowel or consonant

vowels:a,e,i,o,u

consonants:rest all characters

--->Static input

In [67]:

```
ch="K"
if(ch=='a'or ch=='e'or ch=='i' or ch=='o' or ch=='u'
   or ch=='A'or ch=='E'or ch=='I' or ch=='O' or ch=='U'):
    print("Given character is a vowel")
else:
    print("Given character is not a vowel")
```

```
Given character is not a vowel
```

--->Dynamic input

In [69]:

```
ch=str(input("Enter a letter:  "))
if(ch=='a'or ch=='e'or ch=='i' or ch=='o' or ch=='u'
   or ch=='A'or ch=='E'or ch=='I' or ch=='O' or ch=='U'):
    print("Given character is a vowel")
else:
    print("Given character is not a vowel")
```

```
Enter a letter:  d
Given character is not a vowel
```

In [93]:

```
ch=str(input("Enter a letter:  "))
if(ch=='a'or ch=='e'or ch=='i' or ch=='o' or ch=='u'
   or ch=='A'or ch=='E'or ch=='I' or ch=='O' or ch=='U'):
    print(ch," is a vowel")
else:
    print(ch,"  is a consonant")
```

```
Enter a letter:  b
b   is a consonant
```

The drawback of giving result as consonant even when given number can be overcomed using following program

In [96]:

```
ch=str(input("Enter a letter:  "))
if(ch=='a'or ch=='e'or ch=='i' or ch=='o' or ch=='u'
   or ch=='A'or ch=='E'or ch=='I' or ch=='O' or ch=='U'):
    print(ch," is a vowel")
elif(ch=='b'or ch=='c'or ch=='d' or ch=='f' or ch=='g'
     or ch=='h'or ch=='j'or ch=='k' or ch=='l' or ch=='m'
     or ch=='n'or ch=='p'or ch=='q' or ch=='r' or ch=='s'
    or ch=='t'or ch=='v'or ch=='w' or ch=='x' or ch=='y' or ch=='z'
    or ch=='B'or ch=='C'or ch=='D' or ch=='F' or ch=='G'
     or ch=='H'or ch=='J'or ch=='K' or ch=='L' or ch=='M'
     or ch=='N'or ch=='P'or ch=='Q' or ch=='R' or ch=='S'
    or ch=='T'or ch=='V'or ch=='W' or ch=='X' or ch=='Y' or ch=='Z'):
    print(ch,"  is a consonant")
else:
    print("It is not a alphabet")
```

```
Enter a letter:  G
G   is a consonant
```


```
![sample%20image.jfif](attachment:sample%20image.jfif)
```

In [ ]: