

```
In [45]: print("Hello World")

Hello World

In [47]: print(2+3)

5

In [51]: #this is my first python program
print("Hello")

Hello

In [53]: print("Hello") #this is comment

Hello

In [55]: #this is demo
#this is 2nd demo
#this is third demo
print("Hello")

Hello

In [57]: """ this is also a comment """
print("Hello")

Hello

In [59]: a=10
b="Arun"
print(a)
print(b)

10
Arun

In [61]: arun=10
print(arun)

10

In [63]: _arun=10
print(arun)

10

In [65]: $arun=10
print(arun)

Cell In[65], line 1
$arun=10
^
SyntaxError: invalid syntax

In [67]: #arun=10
print(arun)

10

In [70]: #arun=10
print(#arun)

10

In [74]: &arun=10
print(arun)

Cell In[74], line 1
&arun=10
^
SyntaxError: invalid syntax

In [76]: !arun=10
print(larun)

Cell In[76], line 1
!arun=10
^
SyntaxError: invalid decimal literal

In [80]: arlun=10
print(arlun)

10

In [86]: arun$=10
print(arun$)

Cell In[86], line 1
arun$=10
^
SyntaxError: invalid syntax

In [88]: x=10
y="Arun"
print(x)
print(y
)

10
Arun

In [102]: x, y, z = "Arun", "Sumit", "Ramesh"
print(x)
print(y)
print(z)

Arun
Sumit
Ramesh

In [104]: x = y = z = "Arun"

print(x)
print(y)
print(z)

Arun
Arun
Arun

In [106]: x = "Arun"
y = "Kumar"
z = "Sharma"
print(x, y, z)

Arun Kumar Sharma

In [110]: x = 10
print(type(x))

<class 'int'>

In [112]: y = 2.5
print(type(y))

<class 'float'>

In [114]: a = "Arun"
print(type(a))

<class 'str'>

In [116]: a = 5+3i
print(type(a))

Cell In[116], line 1
a = 5+3i
^
SyntaxError: invalid decimal literal

In [118]: a = 5+3j
print(type(a))

<class 'complex'>

In [120]: b = [1,2,3,4,5]
print(b)
print(type(b))

[1, 2, 3, 4, 5]
<class 'list'>

In [122]: b = (1,2,3,4,5)
print(b)
print(type(b))

(1, 2, 3, 4, 5)
<class 'tuple'>

In [124]: b = {1,2,3,4,5}
print(b)
print(type(b))

{1, 2, 3, 4, 5}
<class 'set'>

In [126]: c = {"Arun": 1, "Sumit" : 2}
print(c)
print(type(c))

{'Arun': 1, 'Sumit': 2}
<class 'dict'>

In [128]: %whos

Variable      Type      Data/Info
-----
NamespaceMagics  MetaHasTraits  <class 'IPython.core.magi<...>mespace.NamespaceMagics'>
a              complex      (5+3j)
a1             int          10
arlun          int          10
arun           int          10
arun1          int          10
arun1k         int          10
arun_k         int          10
arunk2         int          10
b              set          {1, 2, 3, 4, 5}
c              dict         n=2
dataframe_columns  function     <function dataframe_columns at 0x14cfa2200>
dataframe_hash    function     <function dataframe_hash at 0x14cfa2d40>
dtypes_str       function     <function dtypes_str at 0x14cfa2160>
get_dataframes    function     <function get_dataframes at 0x14cfa2700>
get_ipython       function     <function get_ipython at 0x10449a3e0>
getpass          module       <module 'getpass' from '/<...>b/python3.12/getpass.py'>
hashlib          module       <module 'hashlib' from '/<...>b/python3.12/hashlib.py'>
import_pandas_safely  function     <function import_pandas_safely at 0x14cfa2de0>
is_data_frame     function     <function is_data_frame at 0x14cfa2a20>
json             module       <module 'json' from '/opt<...>on3.12/json/__init__.py'>
sys             module       <module 'sys' (built-in)>
x              int          10
y              float        2.5
z              str          Sharma

In [130]: a = 12
b = 4
print(a%b)

0

In [132]: a = 11
b = 4
print(a%b)

3

In [134]: a = 6.66
b = 2.6
print(a%b)

1.46

In [136]: a = 5+2j
b = 3
print(a%b)

-----
TypeError                                Traceback (most recent call last)
Cell In[136], line 3
      1 a = 5+2j
      2 b = 3
----> 3 print(a%b)
```

`TypeError: unsupported operand type(s) for %: 'complex' and 'int'`

In []: