2

```
## Today Agenda
2
3
  - Markdown format
4
   - Python Basics
5
      - Variables
       - Keywords
6
7
1
   - Literate Programming :
       - The combination of both documentation and coding
```

```
1
  - Markdown format
       - It is a light-weight and popular markup language
2
       - It is similar to HTML mode of markup tags
3
4
```

```
### Short cut keys:
 1
 2
        - esc + h --> To visible list of shortcut keys in markdown format
 3
   ### Cell modes:
 4
 5
   ### code- To run the python code
 6
   ### Markdown- To prepare documentation
 7
 8
   ### For running cells -
 9
10
   - shift + enter
11
    - ctrl +enter
12
13
14
15
16
```

```
In [ ]:
```

```
# HTML
1
2
3
   <h1>....<h6>
4
5
6
```

### In Markdown Heading (# , = ,- )

```
1
   # Welcome to Python Online Session
3
   ## Welcome to Python Online Session
   ### Welcome to Python Online Session
5
   #### Welcome to Python Online Session
6
7
   ##### Welcome to Python Online Session
   ##### Welcome to Python Online Session
8
9
   ###### Welcome to Python Online Session
   Welcome to Python Online Session
10
11
```

# Welcome to Python Online Session

14 15

16

12 13

**Welcome to Python Online Session** 

17 18

19

```
<h1>Hello</h1>
   # Hello
 3
   <h2>Hello</h2>
4
 5
   <h3>Hello</h3>
   <h4>Hello</h4>
7
   <h5>Hello</h5>
8
   <h6>Hello</h6>
9
   <h7>Hello</h7>
10
   <h8>Hello</h8>
11
```

# ## Paragraph(No symbol is using this)

```
Hai Guys , Welcome to Online Python Programming by APSSDC conducted by
  INDUPRIYA...Hai Guys , Welcome to Online Python Programming by APSSDC conducted by
  INDUPRIYA...Hai Guys ,
2
3
4
5
  Welcome to Online Python Programming by APSSDC conducted by INDUPRIYAHai Guys ,
  Welcome to Online Python Programming by APSSDC conducted by INDUPRIYA
```

# ### Break tag (<br>)

```
Welcome to Online Python Programming by APSSDC conducted by INDUPRIYAHai Guys ,
Welcome to Online Python Programming by APSSDC conducted by INDUPRIYA..
Welcome to Online Python Programming by APSSDC conducted by INDUPRIYAHai Guys ,
Welcome to Online Python Programming by APSSDC conducted by INDUPRIYA....<br
Welcome to Online <br/> Python Programming by APSSDC conducted by INDUPRIYAHai Guys ,
Welcome to Online Python Programming by APSSDC conducted by INDUPRIYA
```

# ### Bold (\*\* \*\*) or ( )

Welcome to Online <br/> \*\*Python Programming\*\* by \*\*APSSDC\*\* conducted by \*\*INDUPRIYA\*\*.....Hai Guys , Welcome to Online Python Programming by APSSDC conducted by INDUPRIYA

# ### Itallic (\* \*) or (\_ \_)

Welcome to Online <br/>
<br/>
\*Python Programming\* by \*APSSDC\* conducted by \*\*INDUPRIYA\*\*.....Hai Guys , Welcome to Online Python Programming by APSSDC conducted by INDUPRIYA

8

Mouni

```
In [ ]:
 1 ### Both bold and Itallic(*** ***) or (_____)
   Welcome to Online <br/>
<br/>
**Python Programming** by ***APSSDC*** conducted by
    ***INDUPRIYA***.....Hai ___Guys___ , Welcome to Online Python Programming by APSSDC
    conducted by INDUPRIYA
 1
   #### Block Quotes (>)
 2
    > Welcome to Online <br/> **Python Programming** by ***APSSDC*** conducted by
    ***INDUPRIYA***.....Hai Guys , Welcome to Online Python Programming by APSSDC
    conducted by INDUPRIYA
   > Welcome to Online <br> **Python Programming** by ***APSSDC*** conducted by
    ***INDUPRIYA***.....Hai ___Guys___ , Welcome to Online Python Programming by APSSDC
    conducted by INDUPRIYA
 2
    >> Welcome to Online <br> **Python Programming** by ***APSSDC*** conducted by
 3
    ***INDUPRIYA***.....Hai ___Guys___ , Welcome to Online Python Programming by APSSDC
    conducted by INDUPRIYA
 4
 5
    >>> Welcome to Online <br/> **Python Programming** by ***APSSDC*** conducted by
    ***INDUPRIYA***.....Hai ___Guys___ , Welcome to Online Python Programming by APSSDC
    conducted by INDUPRIYA
 6
 7
    >>>> Welcome to Online <br > **Python Programming** by ***APSSDC*** conducted by
    ***INDUPRIYA***.....Hai ___Guys___ , Welcome to Online Python Programming by APSSDC
    conducted by INDUPRIYA
   ### Order List
 1
 2
 3
    4
       APSSDC
 5
       Python Programming
       Indu Priya
 6
 7
       Lucky
       Mouni
 8
 9
       MOM
10 
 1 1. ### APSSDC
   2. Python Programming
   3. **InduPriya**
 3
   4. *Lucky*
 5
   5. Mouni
   6. ***MOM***
    ### Unorder List (-, *, +)
 1
 2
 3
    <l
 4
       APSSDC
 5
        Python Programming
 6
       Indu Priya
 7
        Lucky
```

```
1 - ### APSSDC
2 - Python Programming
3 - **InduPriya**
4 - *Lucky*
5 - Mouni
6 - ***MOM***
```

```
1 + ### APSSDC
2 + Python Programming
3 + **InduPriya**
4 + *Lucky*
5 + Mouni
6 + ***MOM***
```

```
1 ### Links
2 3
```

## 1 ### Images

```
<img src = "apssdc.png"/>
 1
 2
 3
    <img src = "python.png"/>
 4
 5
    <img src = "python.jpg"/>
 6
 7
    <img src = "python.jpg" height=350 width=350/>
 8
9
    <img src = "apssdc.png" height=50 width=50 align="right"/>
10
    <img src = "apssdc.png" height=50 width=50 align="left"/>
11
12
    <img src = "apssdc.png" height=50 width=50 />
13
14
15
16
17
   ### In markdown
18
19
20
    ![](python.jpg)
21
22
    ![This is python image](python.png) # If we gave wrong image address
23
24
    ![This is python image](python.jpg)
25
26
```

```
1 ### Video
2
3 <video controls src="myvideo.mp4"/>
5
6
```

```
1 <video controls src="myvideo.mp4" height="50" width="50"/>
```

### 1 ### Audio

```
1 <audio controls src="myaudio.mp3"/>
```

### 1 ## Table Format

```
1
2 
3 One
4 One
5 One
6
```

# 1 ## Python Basics

```
### Variables
 1
2
 3
   - Python is a case sensitive(small letters are not equal to capital letters)
4
    - Variable is used to
 5
        - Holds value
 6
        - Assign a value
7
        - refer memory location
8
    - Syn:
9
        - **variable name = value**
10
11
   #### Rules for creating Variables
12
13
```

```
- Variable cannot be start with special character or digit or number
- It cant accept/allow spaces
- We have to use only one special characer (_)
- We can start variable with **Undescore** or **alphabets**
-
```

### In [5]:

### In [6]:

### In [7]:

```
1 @a=10 # special character
File "<ipython-input-7-ea88de52c4a1>", line 1
  @a=10
```

SyntaxError: invalid syntax

### In [8]:

```
1 variable$name= 10
File "<ipython-input-8-32d471839057>", line 1
   variable$name= 10
```

SyntaxError: invalid syntax

### In [15]:

```
variable_name=10
variable_name=50
variable_name111=100
```

```
In [14]:
    # we can call variable name with that name or use print option
 2
 3
    variable_name
 4
 5
    # python stores last updates values
Out[14]:
50
In [17]:
   variable_name
   variable_name111
Out[17]:
100
In [21]:
 1
    # we want a multiple variable outputs in one cell use print option
 3
    print("variable_name")
    print("1@@#$%$%^%DFDHYJUFRYHTYJKKOKMHTRY#$R#W$^^*&&(())")
 5
    print(variable_name)
    print(variable_name111)
variable_name
1@@#$%$%^%DFDHYJUFRYHTYJKKOKMHTRY#$R#W$^^*&&(())
50
100
In [51]:
 1
    a=10
 2
    b=10
 3
    c=10
 4
    d=10
 5
    print(a)
10
In [36]:
 1 a
Out[36]:
10
In [37]:
 1
   b
Out[37]:
10
```

```
In [38]:
 1 c
Out[38]:
10
In [40]:
 1 | a=b=c=d=e=100
In [41]:
 1 a
Out[41]:
100
In [42]:
 1 b
Out[42]:
100
In [43]:
 1 e
Out[43]:
100
In [44]:
 1 x=hi
 2 | # here except numerical value or keywords remainig all we have gave with inside ""
                                           Traceback (most recent call last)
NameError
<ipython-input-44-1979c36afbe8> in <module>
----> 1 x=hi
NameError: name 'hi' is not defined
In [45]:
 1 x="hi"
In [46]:
 1 x
Out[46]:
'hi'
```

```
In [47]:
 1 x,y,z,z1,z2="hi","hello",10,40.78,"abc@123"
In [48]:
 1
   z1
Out[48]:
40.78
In [49]:
 1 z2
Out[49]:
'abc@123'
    ### Keywords
 1
 2
 3
    - Keywords is also called as a reserved words
 4
    - we didnt use keywords as a variable names , Function names or any other identifiers
 5
In [ ]:
 1
In [ ]:
 1
In [23]:
 1 import keyword
 2 keyword.kwlist
 ueı,
 'elif',
 'else',
 'except',
 'finally',
 'for',
 'from',
 'global',
 'if',
 'import',
 'in',
 'is',
 'lambda',
 'nonlocal',
 'not',
 'or',
 'pass',
 'raise',
 'return',
 1+001
```

```
In [30]:
  1 import keyword
  2 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']
In [50]:
  1 a=keyword.kwlist
  2 print(len(a))
35
In [22]:
  1 in=10
  File "<ipython-input-22-aaad21344826>", line 1
SyntaxError: invalid syntax
In [ ]:
     as
In [ ]:
     is # keywords displayed in green color
  1
```

```
1 is # keywords displayed in green color
2
3 a b
```

### In [ ]:

1