Literate Programming

- programming along with documentation

In [1]:
```
1 9+9
```

Out[1]: 18

Technical Documentation

- paragraphs,hyperlinks,images
- html code

Markdown Basics

heading1

heading2

heading3

heading4

line5

heading6

####### plain text

font styles

italic text **bold** text

SRK Institute of Technology located at *Enikepadu* in **Vijayawada**

line spacing using html break tag

I am the student of *SRK IT*
located at ...

Topic

- line by line content
  - sub line
- first line
  - subline
    - sub sub line
      - fourth
- second line
  - hfjkasdfoijdsoifjkd

hyper links

- text to display (url)
- Search Engine (https://www.google.com/)
- youtube (https://www.youtube.com/)
- SRK IT (http://srkit.in/)

In [ ]:
```
1
```

executing html code in markdown

welcome to python workshop

colored text

Working with Markdown

Displaying image

Python

- It is a general purpose,high level and interpreted programming language
  - General Purpose
    - used for multiple purposes such as scientific computation, mbl application development,system s/w development etc.
  - High level and
    - user understandable language
  - Interpreted
    - gives us the line by line execution
- **features**

1. simplicity
   - easy to learn and simple to code
   - seems to be English
2. sensitive to both case and space
   - case sensitive and space sensitive
3. syntax free
   - doesn't require modules/libraries to execute
4. dynamically typed
   - there is no type declaration of var,functions etc
   - it gets while execution dynamically
5. semi-object oriented
   - it is neither procedural nor object oriented
   - it supports oops concepts
6. portable
   - platform independent 1.CMD,IDLE,py charm,Anaconda3
     B. pydroid (mobile app)

- **Applications**
  - it is the building block of all current running technologies such as Cloud Computing,Robotics,IOT , Machine Learning,Data Analysis, Artificial Intelligence & Web development

In [3]:
```
1 9+7
```

Out[3]: 16

welcome message

print() is the pre-defined function used to display/print the output to user

In [4]:
```
1 print('Welcome to python workshop')
```

```
Welcome to python workshop
```

In [5]:
```
1 print("SRK Institute of Technology")
```

```
SRK Institute of Technology
```

In [10]:
```
1 print('''multiple quotes''')
```

```
multiple quotes
```

In [7]:
```
1 print(8) # value doen't require quotation
```

```
8
```

In [8]:
```
1 print(90.67)
```

```
90.67
```

print()

- prints the data
  1. message
     - should be enclosed in quotations
  2. value
     - need not

In [13]:
```
1 # highlight the sub text in the message
2 # I am from 'SRKIT' located at..
3 print("I am 'siva sai' from SRKIT")
```

```
I am 'siva sai' from SRKIT
```

In [14]:
```
1 PRINT('jsdfjdfjkjk')
```

```
...
```

welcome to python

In [15]:
```
1 print('started with single and ended with double")
```

```
  Input In [15]
    print('started with single and ended with double")
                                                      ^
SyntaxError: EOL while scanning string literal
```

Types of Errors

- an invalid statement in the programming called as error
- 3types of errors
  1. syntax error
     - error related to syntax
  2. value error and
     - type error,name error,value error, file not found error,key error etc..
  3. indentation error
     - error related to space

In [16]:
```
1 7+5
```

Out[16]: 12

In [17]:
```
1 "siva"+"harish"
```

Out[17]: 'sivaharish'

In [18]:
```
1 9+'name'
```

...

In [19]:
```
1 9-4
```

...

In [20]:
```
1 'lastname'-'firstname'
```

...

In [21]:
```
1 5*4
```

Out[21]: 20

In [22]:
```
1 5*s
```

```
---------------------------------------------------------------------------
NameError                                 Traceback (most recent call last)
Input In [22], in <cell line: 1>()
----> 1 5*s

NameError: name 's' is not defined
```

In [23]:
```
1 5*"h"
```

Out[23]: 'hhhhh'

In [26]:
```
1 # print your name character wise
2 print("student")
```

...

In [39]:
```
print('s\nt\nu\nd\ne\nn\nt') # using sep
print("student",sep=',',end='.')
print(*'student',sep=',')
print(9,4,6,7,sep=',')
```

```
s
t
u
d
e
n
t
student.s,t,u,d,e,n,t
9,4,6,7
```

In [35]:
```
print(*'hello',sep=',') # seperator operator
```

```
h,e,l,l,o
```

In [32]:
```
# camma separated chars of your name
print(*'college',sep="@",end='.')
```

...

In [33]:
```
print(*'srkit',sep=",",end='.')
```

...

In [ ]:
```

```