

Markdown syntax

Shortcuts

- Esc + m -> Convert coding cell into markdown cell
- esc+ y -> markdown cell into coding cell
- esc+ a -> for new cell above
- esc +b -> for new cell below
- esc +h -> shortcuts
- shift+ enter -> (to run markdown cell)

Largest heading h1

second lagest heading h2

h3

h4

h5

smallest heading h6

styling text

this is italic -> ctrl+i

this is bold text -> ctrl+b

This is bold and italic

~~This is strike through~~

Unordered list

- Cities
 - Vijayawada
 - Guntur
 - Delhi
 - Mumbai

Ordered list (index dot space list elements)

1. IT
2. CSE
3. MECH
4. ECE
5. EEE
6. Civil

Inserting a link

[Google.com](https://www.google.com) (<https://www.google.com>)

<https://www.facebook.com> (<https://www.facebook.com>)

[gmail](https://www.gmail.com) (<https://www.gmail.com>)

Create a link to image

[Python](#) ([index.jpg](#)) [title name](image name.extension)

In []:

data structures

In [4]:

```
l=[10,20,30,40,50]
```

In [5]:

```
l2=[10,"hello",10.2]
```

```
# index starts with 0,1,2.....
```

In [6]:

```
l
```

Out[6]:

```
[10, 20, 30, 40, 50]
```

In [7]:

```
12
```

Out[7]:

```
[10, 'hello', 10.2]
```

In [8]:

```
12[0]
```

Out[8]:

```
10
```

In [9]:

```
12[1]
```

Out[9]:

```
'hello'
```

In [11]:

```
12[2]
```

Out[11]:

```
10.2
```

In [13]:

```
len(12)
```

Out[13]:

```
3
```

In [15]:

```
print(type(12))  
print(len(1))
```

```
<class 'list'>  
5
```

In [16]:

```
1
```

Out[16]:

```
[10, 20, 30, 40, 50]
```

In [17]:

```
print(min(l))
```

10

In [18]:

```
print(max(l))
```

50

In [19]:

```
print(sum(l))
```

150

In [20]:

```
print(sorted(l))
```

[10, 20, 30, 40, 50]

In [21]:

```
print(sorted(l,reverse=True))
```

[50, 40, 30, 20, 10]

In []:

```
### Accessing list elements
```

```
l=[12,67,90,76,50]
```

```
# forward index 0,1,2,3...
```

```
# backward index -1,-2,-3....backside
```

```
[12,67, 90, 76, 50]
```

```
0  1  2  3  4  # forward index
```

```
-5 -4 -3 -2 -1 # backward index
```

In [25]:

```
l=[12,67,90,76,50]
```

```
print(l[0])
```

```
print(l[1])
```

```
print(l[2])
```

12

67

90

In [29]:

```
l=[12,67,90,76,50]

print(l[-1])
print(l[-2])
```

50
76

In [30]:

```
# slicing [start:stop:step]

# [90,76,50]

l[2::]
```

Out[30]:

[90, 76, 50]

In [32]:

```
# o/p: [90,50]

l[2::2]
```

Out[32]:

[90, 50]

In [33]:

```
# alternate elements
l=[12,67,90,76,50]
# 12,90,50

l[0::2]
```

Out[33]:

[12, 90, 50]

In [35]:

```
# [67,90,76]

sum(l[1:3+1:])
```

Out[35]:

233

In [38]:

```
### reverse of a list
print(l)
l[::-1]
```

[12, 67, 90, 76, 50]

Out[38]:

[50, 76, 90, 67, 12]

In [40]:

```
### nested list

l=[10,203,[89,"hello",90.8]]

l[1]
```

Out[40]:

203

In [41]:

```
l[2]
```

Out[41]:

[89, 'hello', 90.8]

In [42]:

```
l[2][1]
```

Out[42]:

'hello'

In [46]:

```
print(dir(l),end=" ")
```

```
['__add__', '__class__', '__class_getitem__', '__contains__', '__delattr__',
 '__delitem__', '__dir__', '__doc__', '__eq__', '__format__', '__ge__',
 '__getattr__', '__getitem__', '__gt__', '__hash__', '__iadd__', '__imul__', '__init__', '__init_subclass__', '__iter__', '__le__', '__len__',
 '__lt__', '__mul__', '__ne__', '__new__', '__reduce__', '__reduce_ex__',
 '__repr__', '__reversed__', '__rmul__', '__setattr__', '__setitem__', '__sizeof__', '__str__', '__subclasshook__', 'append', 'clear', 'copy', 'count', 'extend', 'index', 'insert', 'pop', 'remove', 'reverse', 'sort']
```

In [48]:

```
# append
```

```
12
```

Out[48]:

```
[10, 'hello', 10.2]
```

In [49]:

```
12.append(900)
```

In [50]:

```
12
```

Out[50]:

```
[10, 'hello', 10.2, 900]
```

In [64]:

```
# extend
```

```
l1=[1,2,3]
```

```
l2=[4,5,6]
```

```
l1.extend(l2)
```

In [65]:

```
l1
```

Out[65]:

```
[1, 2, 3, 4, 5, 6]
```

In [66]:

```
l1.append(l2)
```

In [67]:

```
l1
```

Out[67]:

```
[1, 2, 3, 4, 5, 6, [4, 5, 6]]
```

In []:

