

Mar 8 DSA Day1

March 8, 2021

```
[2]: x = 10  
     print(x)
```

10

```
[5]: a = b = c = 10  
     print(a, end = ' ')  
     print(b, end = ' ')  
     print(c)
```

10 10 10

```
[6]: print(a, b, c)
```

10 10 10

```
[7]: a, b, c = 10, 20, 30  
     print(a, b, c)
```

10 20 30

```
[10]: x = input('enter val1: ')  
      y = input('Enter val2: ')  
      print(x + y)  
      print(type(x), type(y))
```

enter val1: 10
Enter val2: 20
1020
<class 'str'> <class 'str'>

```
[9]: print('hello' + 'coders')
```

hellocoders

```
[11]: x = int(input('enter val1: '))  
      y = int(input('Enter val2: '))  
      print(x + y)
```

```
print(type(x), type(y))
```

```
enter val1: 10
Enter val2: 20
30
<class 'int'> <class 'int'>
```

```
[13]: x = input('Enter values: ')
      print(x)
      print(type(x))
```

```
Enter values: 10 20 30 40 50
10 20 30 40 50
<class 'str'>
```

```
[14]: "10 20 30 40 50"
```

```
[14]: '10 20 30 40 50'
```

```
[17]: x = input('Enter values: ').split()
      vals = []
      print(x)
      for i in x:
          vals.append(int(i))
      print(vals)
```

```
Enter values: 10 20 30 40 50
['10', '20', '30', '40', '50']
[10, 20, 30, 40, 50]
```

```
[18]: vals = [int(i) for i in input('Enter values: ').split()]
      print(vals)
```

```
Enter values: 10 20 30 40 50
[10, 20, 30, 40, 50]
```

1 List

li = [] or li = list()

```
[19]: li = [1, 2, 3, 4, 5, 6]
      print(li)
      print(type(li))
```

```
[1, 2, 3, 4, 5, 6]
<class 'list'>
```

```
[22]: li = [9, 6, 5, 0, 8, 2, 12, 10]
      print(li[0])
      print(li[-1])
      print(li[-2])
```

```
9
10
12
```

1.1 Slicing operation

```
[27]: print(li)
      print(li[1:5]) #li[start : end]
      print(li[1:])
      print(li[:5])
      print(li[:])
```

```
[9, 6, 5, 0, 8, 2, 12, 10]
[6, 5, 0, 8]
[6, 5, 0, 8, 2, 12, 10]
[9, 6, 5, 0, 8]
[9, 6, 5, 0, 8, 2, 12, 10]
```

```
[31]: print(li)
      print(li[: : 1]) #li[start : end : step]
      print(li[: : 2])
      print(li[: : 3])
      print(li[: : -1])
```

```
[9, 6, 5, 0, 8, 2, 12, 10]
[9, 6, 5, 0, 8, 2, 12, 10]
[9, 5, 8, 12]
[9, 0, 12]
[10, 12, 2, 8, 0, 5, 6, 9]
```

1.2 List Methods

```
[36]: li = [9, 6, 5, 0, 8, 2, 12, 10]
      li.insert(0, 15)
      print(li)
      li.insert(15, 25)
      print(li)
      li.insert(-20, 'hello')
      print(li)
```

```
[15, 9, 6, 5, 0, 8, 2, 12, 10]
[15, 9, 6, 5, 0, 8, 2, 12, 10, 25]
['hello', 15, 9, 6, 5, 0, 8, 2, 12, 10, 25]
```

```
[38]: print(li)
      li.pop()
      print(li)
      li.pop(2)
      print(li)
      li.remove('hello')
      print(li)
```

```
['hello', 15, 6, 5, 0, 8, 2, 12, 10]
```

```
['hello', 15, 6, 5, 0, 8, 2, 12]
```

```
['hello', 15, 5, 0, 8, 2, 12]
```

```
[15, 5, 0, 8, 2, 12]
```

```
[ ]:
```