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] 3
```

```
[38]: print(li)
```

```python
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]
```

[ ]: