# Simple Python code

In [1]:

str1="Happy Birthday" str1[0] str1[len(str1)-1]

Out[1]: 'y'

# Working on strings

In [2]:

str1[-1]0

Out[2]: 'y'

In [3]:

str1[0:6]

Out[3]: 'Happy '

In [6]:

str1[len(str1)-1::-1]

Out[6]: 'yadhtriB yppaH'

In [9]:

str1[0:len(str1):2]

Out[9]: 'HpyBrha'

In [10]:

str1[5::-2]

Out[10]: ' pa'

In [11]:

str2="python programming"

In [12]:

str2

Out[12]: 'python programming'

In [13]:

str2 \*3

Out[13]: 'python programmingpython programmingpython programming'

In [15]:

str2[7:]

Out[15]: 'programming'

In [16]:

str2[7:]\*10

Out[16]: 'programmingprogrammingprogrammingprogrammingprogrammingprogrammingprogra mmingprogrammingprogrammingprogramming'

In [19]:

print((str2[7:]+"**\n**")\*3)

programming programming programming

In [20]:

li=[123,345,'python'] len(li)

Out[20]: 3

In [21]:

li[2]

Out[21]: 'python'

In [26]:

li[len(li)-1]='programming' li.append('python')

li

Out[26]: [123, 345, 'programming', 'programming', 'python']

In [27]:

print(li)

[123, 345, 'programming', 'programming', 'python']

In [28]:

li[2:]

Out[28]: ['programming', 'programming', 'python']

In [29]:

li.pop()

Out[29]: 'python'

In [30]:

li

Out[30]: [123, 345, 'programming', 'programming']

In [31]:

li.remove('programming')

In [32]:

li

Out[32]: [123, 345, 'programming']

In [33]:

li.pop(1)

Out[33]: 345

In [34]:

li

Out[34]: [123, 'programming']

In [36]:

li.insert(0,555)

In [37]:

li

Out[37]: [555, 123, 'programming']

In [38]:

li2=[1,2,3]

In [39]:

li.insert(0,li2)

In [40]:

li

Out[40]: [[1, 2, 3], 555, 123, 'programming']

In [41]:

li.append(li2)

In [42]:

li

Out[42]: [[1, 2, 3], 555, 123, 'programming', [1, 2, 3]]

In [43]:

li[0]

Out[43]: [1, 2, 3]

In [44]:

li[0][0]

Out[44]: 1

In [46]:

li3=[1,2,3],[4,5,6]

In [49]:

li.extend(li3)

In [50]:

li

Out[50]: [[1, 2, 3],

555,

123,

'programming', [1, 2, 3],

[1, 2, 3],

555,

123,

'programming',

|  |  |  |
| --- | --- | --- |
| [1, | 2, | 3], |
| [1, | 2, | 3], |
| [4, | 5, | 6]] |

In [54]:

li4=[[1,2,3],[4,5,6],[7,8,9]]

li4.insert(3,[10,11,12])

In [55]:

li4

Out[55]: [[1, 2, 3], [4, 5, 6], [7, 8, 9], [10, 11, 12]]

In [57]:

li4[1].pop(1)

Out[57]: 5

# Loops

In [60]:

**for** i **in** range(0,len(li4)):

**for** j **in** range(0,len(li4[i])): print(li4[i][j],end= ' ')

1 2 3 4 6 7 8 9 10 11 12

# Working On Tuple

In [65]:

t1=(123,345,567) t1[2]+t1[1]

t1[len(t1)-1] t1[1:3]

Out[65]: (345, 567)

# Displaying selected elements

In [66]:

str(t1[0])

Out[66]: '123'

In [67]:

str(t1[1])

Out[67]: '345'

In [69]:

str(t1[0])[1]

Out[69]: '2'

In [72]:

str(t1[0])[1]+" "+str(t1[1])[1]+" "+str(t1[2])[1]

Out[72]: '2 4 6'

In [6]:

*#reversing all characters of all eleements in a tuple* t1=(123,345,567)

In [7]:

t1

Out[7]: (123, 345, 567)

In [9]:

str(t1[0])[2::-1]+str(t1[1])[2::-1]+str(t1[2])[2::-1]

Out[9]: '321543765'

# Taking User From The USER

In [11]:

str1=input("enter a string :" )

enter a string : Python

# Dictionaries

In [16]:

d1={'procedural': 'c' ,'scripting': 'python'} d1

Out[16]: {'procedural': 'c', 'scripting': 'python'}

In [18]:

d1['scripting'] d1.values() d1.keys()

Out[18]: dict\_keys(['procedural', 'scripting'])

In [19]:

d2={'symbolic':'mathematica','logic':' prolog'} d1.update(d2) *#merging two dictionaries*

d1['object oriented']='java ' *#adding a new element*

In [31]:

d1

Out[31]: {'procedural': 'c',

'scripting': 'python', 'symbolic': 'mathematica', 'logic': ' prolog',

'object oriented': 'java '}

In [32]:

o1={'java':'javac'}

In [33]:

o2={'c':'./a.out'}

In [34]:

o1.update(o2)

In [35]:

o1

Out[35]: {'java': 'javac', 'c': './a.out'}

In [36]:

li=[[1,2,3],[3,4,5],[5,6,7]]

In [37]:

li

Out[37]: [[1, 2, 3], [3, 4, 5], [5, 6, 7]]

In [29]:

d1 ['logic']

Out[29]: ' prolog'