```
In [1]: N = ["Ali Kaild", 11.2, 1879]
Out[1]:['Ali Kaild', 11.2, 1879]
In [2]: print ('the same element using negative and positive indexing: \n postive:', N,[0],
           '\n Negative:', N[-3])
       print ('the same element using negative and positive indexing: \n postive:', N,[1],
           '\n Negative:', N[-2])
       print ('the same element using negative and positive indexing: \n postive:', N,[2],
           '\n Negative:', N[-1])
the same element using negative and positive indexing:
postive: ['Ali Kaild', 11.2, 1879] [0]
Negative: Ali Kaild
the same element using negative and positive indexing:
postive: ['Ali Kaild', 11.2, 1879] [1]
Negative: 11.2
the same element using negative and positive indexing:
postive: ['Ali Kaild', 11.2, 1879] [2]
Negative: 1879
In [3]: ["Ali Kalid", 11.2,1879,[3,4],("B",3)]
Out[3]:['Ali Kalid', 11.2, 1879, [3, 4], ('B', 3)]
In [4]: N =["Ali Kalid",11.2,1879,"AK",3]
Out[4]:['Ali Kalid', 11.2, 1879, 'AK', 3]
In [5]: N[3:5]
Out[5]:['AK', 3]
In [6]: N = ["Ali Kalid", 11.3]
       N.extend(['pop',11])
Out[6]:['Ali Kalid', 11.3, 'pop', 11]
In [7]: N =["Ali Kalid",11.3]
       N.append(['pop',11])
Out[7]:['Ali Kalid', 11.3, ['pop', 11]]
In [8]: N = ["Ali Kalid", 11.3]
       N.extend(['pop',11])
Out[8]:['Ali Kalid', 11.3, 'pop', 11]
In [9]: N.append(['a,b'])
Out[9]:['Ali Kalid', 11.3, 'pop', 11, ['a,b']]
In [10]: A=["diisco", 11,2.1]
        print ('Before change:',A)
        A[0]= 'hard rock'
        print ('After change:',A)
Before change: ['diisco', 11, 2.1]
After change: ['hard rock', 11, 2.1]
In [11]: print ('Before change:',A)
        del (A[0])
        print('After change:',A)
Before change: ['hard rock', 11, 2.1]
After change : [11, 2.1]
In [12]: 'hard rock'.split()
Out[12]:['hard', 'rock']
In [13]: 'E,Z,R,H'.split(',')
Out[13]:['E', 'Z', 'R', 'H']
In [14]: E=["hard rock",11,2.1]
        Z=E
        print('E:',E)
        print('Z:',Z)
E: ['hard rock', 11, 2.1]
Z: ['hard rock', 11, 2.1]
In [15]: print('Z[0]:',Z[0])
        E[0]= "Apple"
        print ('Z[0]:',Z[0])
Z[0]: hard rock
Z[0]: Apple
In [16]: Z=E[:]
        Ζ
```

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Out[16]:['Apple', 11, 2.1]
In [17]: print('Z[0]:',Z[0])
        E[0]= "hard rock"
        print ('Z[0]:',Z[0])
Z[0]: Apple
Z[0]: Apple
 \label{eq:ln}  \mbox{In [18]: Dict = {"key1":1,"key2":"2","key3":[3,3,3],"key4":(4,4,4),('key5'):5,(0,1):6} } 
        Dict
Out[18]:{'key1': 1,
         'key2': '2',
         'key3': [3, 3, 3],
         'key4': (4, 4, 4),
         'key5': 5,
         (0, 1): 6
In [19]: Dict["key1"]
Out[19]:1
In [20]: Dict[(0, 1)]
Out[20]:6
In [21]: release_year_dict ={"Thriller": "1999", "Back in Black": "1970",\
                     "The Dark Side of the Moon": "1977", "The Bodyquard": "1993",\
                     "Bat Out of Hell":"1978", "Their Greatest Hits(1972-1976)": "19977",\
                     "Monday Night Fever": "1976", "Rumours": "1976"}
        release year dict
Out[21]:{'Thriller': '1999',
         Back in Black': '1970'.
         'The Dark Side of the Moon': '1977',
         'The Bodyguard': '1993',
         'Bat Out of Hell': '1978',
         'Their Greatest Hits(1972-1976)': '19977',
         'Monday Night Fever': '1976',
         'Rumours': '1976'}
In [22]: release_year_dict['Thriller']
Out[22]:'1999'
In [23]: release_year_dict['The Bodyguard']
Out[23]:'1993'
In [24]: release_year_dict.keys()
Out[24]:dict keys(['Thriller', 'Back in Black', 'The Dark Side of the Moon', 'The Bodyguard', 'Bat Out of Hell', 'Their Greatest Hits(1972-1976)', 'Monday Night F
        ever', 'Rumours'])
In [25]: release_year_dict.values()
Out[25]:dict_values(['1999', '1970', '1977', '1993', '1978', '19977', '1976', '1976'])
In [26]: release_year_dict['Graduation'] = '2010'
        release_year_dict
Out[26]:{'Thriller': '1999'.
         'Back in Black': '1970',
         'The Dark Side of the Moon': '1977',
         'The Bodyguard': '1993',
         'Bat Out of Hell': '1978'
         'Their Greatest Hits(1972-1976)': '19977',
         'Monday Night Fever': '1976',
         'Rumours': '1976',
         'Graduation': '2010'}
In [27]: del(release_year_dict['Thriller'])
        del(release year dict['Graduation'])
        release_year_dict
Out[27]:{'Back in Black': '1970',
         'The Dark Side of the Moon': '1977',
         'The Bodyguard': '1993',
         'Bat Out of Hell': '1978'.
         'Their Greatest Hits(1972-1976)': '19977',
         'Monday Night Fever': '1976',
         'Rumours': '1976'}
In [28]: 'The Bodyguard' in release_year_dict
Out[28]:True
In [29]: soundtrack_dic = {"The Bodyguard":"1993", "Monday Night Fever":"1976"}
        soundtrack dic
Out[29]:{'The Bodyguard': '1993', 'Monday Night Fever': '1976'}
In []:
```