**LIST**

**list1=['book','novels','manuscripts','tamilbooks']**

**list2=['maths books','puzzles','GK']**

**print(list1)**

**print(list2)**

**list1.append('notes')**

**print(list1)**

**list1.insert(2,'python programming')**

**print(list1)**

**list2.append('java')**

**print(list2)**

**list2.pop(0)**

**print(list2)**

**list1.remove('tamilbooks')**

**print(list1)**

**list1.extend(list2)**

**print(list1)**

**O\P**

**['book', 'novels', 'manuscripts', 'tamilbooks']**

**['maths books', 'puzzles', 'GK']**

**['book', 'novels', 'manuscripts', 'tamilbooks', 'notes']**

**['book', 'novels', 'python programming', 'manuscripts', 'tamilbooks', 'notes']**

**['maths books', 'puzzles', 'GK', 'java']**

**['puzzles', 'GK', 'java']**

**['book', 'novels', 'python programming', 'manuscripts', 'notes']**

**['book', 'novels', 'python programming', 'manuscripts', 'notes', 'puzzles', 'GK', 'java']**

**2)TUPLE:**

**PROGRAM:**

**tup1=(&#39;engine&#39;,&#39;brake&#39;,&#39;horn&#39;,&#39;mirror&#39;)**

**tup2=(&#39;fueltank&#39;,&#39;seat&#39;,&#39;accelerater&#39;)**

**print(tup1)**

**print(tup2)**

**print(tup1[0])**

**print(tup2[2])**

**print( &#39;sound&#39; in tup1)**

**print(&#39;seat&#39; in tup2)**

**print(tup1+(&#39;wheel&#39;,&#39;petrol&#39;,&#39;diesel&#39;))**

**OUTPUT:**

**(&#39;engine&#39;, &#39;brake&#39;, &#39;horn&#39;, &#39;mirror&#39;)**

**(&#39;fueltank&#39;, &#39;seat&#39;, &#39;accelerater&#39;)**

**engine**

**accelerater**

**False**

**True**

**(&#39;engine&#39;, &#39;brake&#39;, &#39;horn&#39;, &#39;mirror&#39;, &#39;wheel&#39;, &#39;petrol&#39;, &#39;diesel&#39;)**

**3)SET:**

**PROGRAM:**

**set1={76,97,100,986,76,343,100,65}**

**set2={986,76,948,231,100}**

**print (set1)**

**print(set2)**

**print(set1-set2)**

**print(set2-set1)**

**print(set1&amp;set2)**

**print(set1^set2)**

**print(set1|set2)**

**OUTPUT:**

**{65, 97, 100, 343, 986, 76}**

**{100, 948, 231, 986, 76}**

**{65, 97, 343}**

**{948, 231}**

**{986, 100, 76}**

**{65, 97, 948, 231, 343}**

**{65, 97, 100, 231, 76, 948, 343, 986}**

**4)DICTIONARY:**

**PROGRAM:**

**dict1={}**

**print(dict1)**

**dict1={&#39;os&#39;:&#39;windows 10&#39;,&#39;processor&#39;:&#39;intel core i5&#39;,&#39;memory&#39;:&#39;8GB&#39;,&#39;hardware&#39;:&#39;120 GB&#39;,&#39;wireless**

**net adaptor&#39;:802.11}**

**print(dict1)**

**dict1[&#39;os&#39;]=&#39;windows 11&#39;**

**print(dict1)**

**print(dict1.get(&#39;memory&#39;))**

**print(len(dict1))**

**print(dict1.keys())**

**print(dict1.values())**

**print(dict1.items())**

**OUTPUT:**

**{}**

**{&#39;os&#39;: &#39;windows 10&#39;, &#39;processor&#39;: &#39;intel core i5&#39;, &#39;memory&#39;: &#39;8GB&#39;, &#39;hardware&#39;: &#39;120 GB&#39;, &#39;wireless net**

**adaptor&#39;: 802.11}**

**{&#39;os&#39;: &#39;windows 11&#39;, &#39;processor&#39;: &#39;intel core i5&#39;, &#39;memory&#39;: &#39;8GB&#39;, &#39;hardware&#39;: &#39;120 GB&#39;, &#39;wireless net**

**adaptor&#39;: 802.11}**

**8GB**

**5**

**dict\_keys([&#39;os&#39;, &#39;processor&#39;, &#39;memory&#39;, &#39;hardware&#39;, &#39;wireless net adaptor&#39;])**

**dict\_values([&#39;windows 11&#39;, &#39;intel core i5&#39;, &#39;8GB&#39;, &#39;120 GB&#39;, 802.11])**

**dict\_items([(&#39;os&#39;, &#39;windows 11&#39;), (&#39;processor&#39;, &#39;intel core i5&#39;), (&#39;memory&#39;, &#39;8GB&#39;), (&#39;hardware&#39;, &#39;120**

**GB&#39;), (&#39;wireless net adaptor&#39;, 802.11)])**