In [ ]:

```
# list :A list is a data structure in Python that is a mutable, or changeable, ordered sequ



lst=["python",10,10.5,[1,2,3],"hey"]
lst
```

In [2]:

```
#list appending
lst.append("hello")
lst
```

Out[2]:

```
['python', '10', '10.5', [1, 2, 3], 'hey', 'hello']
```

In [8]:

```
# list indexing
lst.index("hey")
```

Out[8]:

```
4
```

In [9]:

```
lst
```

Out[9]:

```
['python', '10', '10.5', [1, 2, 3], 'hey', 'hello']
```

In [14]:

```
#list inserting
lst.insert(20,"ladkat")
lst
```

Out[14]:

```
['python', 10, 10.5, [1, 2, 3], 'hey', 'ladkat', 'ladkat']
```

In [16]:

```
# list removing
lst.remove(10)
lst
```

Out[16]:

```
['python', 10.5, [1, 2, 3], 'hey', 'ladkat', 'ladkat']
```

In [17]:

```
#list reversing
lst.reverse()
lst
```

Out[17]:

```
['ladkat', 'ladkat', 'hey', [1, 2, 3], 10.5, 'python']
```

In [18]:

```
#Dictionaries :Dictionary in Python is an unordered collection of data values, used to stor
dit={"Name":"hritik","age":"20","Number":"123456789"}
dit
```

Out[18]:

```
{'Name': 'hritik', 'age': '20', 'Number': '123456789'}
```

In [20]:

```
#get
dit.get('Name')
'hritik'
```

Out[20]:

```
'hritik'
```

In [21]:

```
#update
dit.update({"Place":"Pune"})
dit
```

Out[21]:

```
{'Name': 'hritik', 'age': '20', 'Number': '123456789', 'Place': 'Pune'}
```

In [22]:

```
#items
dit.items()
```

Out[22]:

```
dict_items([('Name', 'hritik'), ('age', '20'), ('Number', '123456789'), ('Pl
ace', 'Pune')])
```

In [23]:

```
#pop
dit.pop("Name")
```

Out[23]:

```
'hritik'
```

In [25]:

```
#sets
st={"hritik","Pune",1,2,3,3,3,4,4,5,6,6,6,7}
st
```

Out[25]:

```
{1, 2, 3, 4, 5, 6, 7, 'Pune', 'hritik'}
```

In [26]:

```
st1={"hello",1,3,4,4,4,8,9}
st
```

Out[26]:

```
{1, 2, 3, 4, 5, 6, 7, 'Pune', 'hritik'}
```

In [27]:

```
#intersection
st1.intersection(st)
{1, 3, 4}
```

Out[27]:

```
{1, 3, 4}
```

In [29]:

```
#difference
st1.difference(st)
```

Out[29]:

```
{8, 9, 'hello'}
```

In [31]:

```
#Issubset
st1.issubset(st)
```

Out[31]:

```
False
```

In [32]:

```
#Isdisjoint
st1.isdisjoint(st)
```

Out[32]:

```
False
```

In [34]:

```
#Update
st1.update(st)
st1
```

Out[34]:

```
{1, 2, 3, 4, 5, 6, 7, 8, 9, 'Pune', 'hello', 'hritik'}
```

In [36]:

```
#tuple :A tuple is a collection of objects which ordered and immutable.

#Tuples
tup=("hritik","pune",123456789)
tup
```

Out[36]:

```
('hritik', 'pune', 123456789)
```

In [37]:

```
#Count
tup.count("123456789")
```

Out[37]:

```
0
```

In [41]:

```
#Index
tup.index("pune")
```

Out[41]:

```
1
```

In [42]:

```
#strings :A string in Python is a sequence of characters.Strings are immutable

str1="Hi"
print(str1)
```

```
Hi
```

In [43]:

```
str2="welcome"
print(str2)
```

```
welcome
```

In [50]:

```
str3= str1 + str2
print(str3)
```

```
Hiwelcome
```

In [52]:

```
str5="india is my country"
print(str5)
```

```
india is my country
```

In [54]:

```
#capitalize
str="python"
msg=str.capitalize()
print(msg)
```

```
Python
```

In [55]:

```
#count
str="happy happy sad"
msg=str.count("happy")
print(msg)
```

```
2
```

In [71]:

```
#len
str1="python"
print(len(str))
```

```
6
```

In [73]:

```
#max
str="python"
print(max(str))
```

```
y
```

In [75]:

```
#min
str="python"
print(min(str))
```

```
h
```

In [ ]:

```

```