In [1]:
```python
a=["Pune","Mumbai","Satara","Sangli","Latur"]
print(type(a))
```

<class 'list'>

In [2]:
```python
b=list()
print(type(b))
```

<class 'list'>

In [3]:
```python
b=[]
print(b)
```

[]

In [4]:
```python
a=["Pune","Mumbai","Satara","Sangli","Latur"]
print(type(a))
```

<class 'list'>

In [5]:
```python
a=["Pune","Mumbai","Satara","Sangli","Latur"]
a.append("Kolhapur")
a
```

Out[5]:

['Pune', 'Mumbai', 'Satara', 'Sangli', 'Latur', 'Kolhapur']

In [6]:
```python
a=["Pune","Mumbai","Satara","Sangli","Latur"]
a.insert(1,"Kolhapur")
a
```

Out[6]:

['Pune', 'Kolhapur', 'Mumbai', 'Satara', 'Sangli', 'Latur']

In [8]:

```python
a=["Pune","Mumbai","Satara","Sangli","Latur"]
a.insert(-2,"Kolhapur")
a
```

Out[8]:

```
['Pune', 'Mumbai', 'Satara', 'Kolhapur', 'Sangli', 'Latur']
```

In [9]:

```python
a=["Pune","Mumbai","Satara","Sangli","Latur"]
a.insert(-1,"Kolhapur")
a
```

Out[9]:

```
['Pune', 'Mumbai', 'Satara', 'Sangli', 'Kolhapur', 'Latur']
```

In [10]:

```python
a=["Pune","Mumbai","Satara","Sangli","Latur"]
a.append("Kolhapur")
a
```

Out[10]:

```
['Pune', 'Mumbai', 'Satara', 'Sangli', 'Latur', 'Kolhapur']
```

In [11]:

```python
a=["Pune","Mumbai","Satara","Sangli","Latur"]
a.remove("Pune")
a
```

Out[11]:

```
['Mumbai', 'Satara', 'Sangli', 'Latur']
```

In [12]:

```python
ab="Satara"
a=["Pune","Mumbai","Satara","Sangli","Latur"]
a.remove(ab)
a
```

Out[12]:

```
['Pune', 'Mumbai', 'Sangli', 'Latur']
```

```python
a=["Pune","Mumbai","Satara","Sangli","Latur"]
a.pop()
a
```

```
['Pune', 'Mumbai', 'Satara', 'Sangli']
```

```python
a=["Pune","Mumbai","Satara","Sangli","Latur"]
ab=a.index("Satara")
ab
```

```
2
```

Working with For Loop

```python
ab="Satara"
for x in ab:
    print(x)
```

```
S
a
t
a
r
a
```

```python
ab="Satara"
for x in ab:
    print('Data Science',x)
```

```
Data Science S
Data Science a
Data Science t
Data Science a
Data Science r
Data Science a
```

In [21]:

```
for x in range(6):
    print("Machine Learning",x)
```

Machine Learning 0
Machine Learning 1
Machine Learning 2
Machine Learning 3
Machine Learning 4
Machine Learning 5

In [ ]:

```
for x in range(5):
    ab=input("Enter the Student name: ")
```

In [22]:

```
name=["Sachin","Virat","Hardik","Sumit"]
for x in name:
    print(x)
```

Sachin
Virat
Hardik
Sumit

In [24]:

```
name=["Sachin","Virat","Hardik","Sumit"]
for x in name:
    for y in x:
        print("Data Science",y)
```

Data Science S
Data Science a
Data Science c
Data Science h
Data Science i
Data Science n
Data Science V
Data Science i
Data Science r
Data Science a
Data Science t
Data Science H
Data Science a
Data Science r
Data Science d
Data Science i
Data Science k
Data Science S
Data Science u
Data Science m
Data Science i
Data Science t

In [25]:

```python
name=["Sachin","Virat","Hardik","Sumit"]
print(len(name))
```

4

In [26]:

```python
for x in range(len(name)):
    print("Machine Leanring ",x)
```

Machine Leanring 0
Machine Leanring 1
Machine Leanring 2
Machine Leanring 3

In [27]:

```python
for x in range(5):
    print("Machine Learning",x)
```

Machine Learning 0
Machine Learning 1
Machine Learning 2
Machine Learning 3
Machine Learning 4

In [30]:

```python
for x in range(1,5):
    a=10
    ab=a+x
    print(ab,"---",x)
```

11 --- 1
12 --- 2
13 --- 3
14 --- 4

In [31]:

```python
name=["Sachin","Virat","Hardik","Sumit"]
for x in name:
    print(name[-1])
```

Sumit
Sumit
Sumit
Sumit

```python
name=["Sachin","Virat","Hardik","Sumit"]
for x in name:
    print(x[-1])
```

```
n
t
k
t
```

```python
name=["Sachin","Virat","Hardik","Sumit"]
for x in name:
    print(x[0])
```

```
S
V
H
S
```

```python
name=["Sachin","Virat","Hardik","Sumit"]
for x in name:
    ab=x+"Veer"
    print(ab)
```

```
SachinVeer
ViratVeer
HardikVeer
SumitVeer
```

```python
name=["Sachin","Virat","Hardik","Sumit"]
for x in name:
    ab=x[:-2]
    ab1=ab+'veer'
    print(ab,"---after----",ab1)
```

```
Sach ---after---- Sachveer
Vir ---after---- Virveer
Hard ---after---- Hardveer
Sum ---after---- Sumveer
```

```python
name=["Sachin","Virat","Hardik","Sumit"]
```

```python
school=[]
for x in range(5):
    name=input("Enter the Studnet name: ")
    school.append(name)
print(school)
```

```
Enter the Studnet name: Sahin
Enter the Studnet name: Sumit
Enter the Studnet name: Sahi;
Enter the Studnet name: Seema
Enter the Studnet name: Sumit
['Sahin', 'Sumit', 'Sahi;', 'Seema', 'Sumit']
```

```python
school=[]
for x in range(3):
    name=input("Enter the Studnet name: ")
    school.append(name)
# print(school)
```

```
Enter the Studnet name: jhgjh
Enter the Studnet name: jlk
Enter the Studnet name: khk
```

```python
name=["Sachin","Virat","Hardik","Sumit"]
name.remove("Sachin")
```

```python
name
```

```
['Virat', 'Hardik', 'Sumit']
```

```python
name.pop()
name
```

```
['Virat', 'Hardik']
```

In [50]:

```python
for x in range(4):
    print("Data")
```

Data
Data
Data
Data

In [ ]: