data structure for python

LIST

```
In [1]: l=[]
        1
```

Out[1]: 1

```
In [2]: l
```

Out[2]: []

```
In [3]: type(l)
```

Out[3]: list

```
In [4]: len(l)
```

Out[4]: 0

```
In [5]: id(l)
```

Out[5]: 1999337488128

```
In [6]: l.append()
```

```
---------------------------------------------------------------------------
TypeError                                 Traceback (most recent call last)
Cell In[6], line 1
----> 1 l.append()

TypeError: list.append() takes exactly one argument (0 given)
```

```
In [ ]: l.append(10)
```

```
In [ ]: l
```

```
In [ ]: len(l)
```

```
In [ ]: l.append(46)
        l.append(34)
```

```
In [ ]: l
```

```
In [ ]: m=[]
```

```
In [ ]: type(m)
```

```
In [ ]: m.append(23)
        m.append(39)
        m.append(42)
        m.append(77)
```

```
In [ ]: m
```

```
In [ ]: len(m)
```

```
In [ ]: m
```

```
In [ ]: m1 = m.copy()
        m1
```

```
In [ ]: m == m1
```

```
In [ ]: m != m1
```

```
In [ ]: m1.append(100)
```

```
In [ ]: m1
```

```
In [ ]: m == m1
```

```
In [ ]: m != m1
```

```
In [ ]: print(len(m))
        print(len(m1))
```

```
In [ ]: print(m)
        print(m1)
```

```
In [ ]: m.clear()
```

```
In [ ]: m
```

```
In [ ]: m1
```

```
In [ ]: m1.append(2.3,4)
```

```
In [ ]: m.append(23)
        m.append(30)
        m.append(40)
```

```
In [ ]: m
```

```
In [ ]:  m.append('nit')
         m.append(2.4)
         m.append(2+3j)
         m.append(True)
         m.append([1,2,4])
```

```
In [ ]:  m
```

```
In [11]:
```

```
  Cell In[11], line 1
    m1[]
       ^
SyntaxError: invalid syntax
```

```
In [ ]:
```

```
In [ ]:
```