Variable Assignment

```
In [4]: intvar=10
        floatvar=20.0
        strvar="Python language"
        print(intvar)
        print(floatvar)
        print(strvar)
```

```
10
20.0
Python language
```

```
In [2]: print(floatvar)
```

```
20.0
```

```
In [3]: print(intvar)
        print(floatvar)
        print(strvar)
```

```
10
20.0
Python language
```

Multiline Assignment

```
In [5]: intvar,floatvar,strvar=15,25.7,"Python language"
        print(intvar)
        print(floatvar)
        print(strvar)
```

```
15
25.7
Python language
```

```
In [6]: r1=r2=r3=r4=33
        print(r1,r2,r3,r4)
```

```
33 33 33 33
```

String creation

```
In [7]: str1="hello"
        print(str1)
```

```
hello
```

```
In [8]: mystr="python"
        print(mystr)
```

```
python
```

Forward slicing

```
In [1]: str='hello world'
        str
```

```
Out[1]: 'hello world'
```

```
In [2]:  str[0]
```

```
Out[2]:  'h'
```

```
In [3]:  str[1]
```

```
Out[3]:  'e'
```

```
In [4]:  str[3]
```

```
Out[4]:  'l'
```

```
In [5]:  str[10]
```

```
Out[5]:  'd'
```

```
In [6]:  str[2:9:3]
```

```
Out[6]:  'l r'
```

```
In [7]:  str[3:5:7]
```

```
Out[7]:  'l'
```

Backward indexing

```
In [8]:  str
```

```
Out[8]:  'hello world'
```

```
In [9]:  str[-5]
```

```
Out[9]:  'w'
```

```
In [10]:  str[-3]
```

```
Out[10]:  'r'
```

```
In [11]:  str[-9]
```

```
Out[11]:  'l'
```

STring Slicing

```
In [12]:  str="hello python"
          str
```

```
Out[12]:  'hello python'
```

```
In [13]:  str[0:5]
```

```
Out[13]:  'hello'
```

```
In [14]:  str[6:12]
```

```
Out[14]:  'python'

In [15]:  str[-4:]

Out[15]:  'thon'
```

Update and delete string

```
In [16]:  str="hello everyone"
          str

Out[16]:  'hello everyone'

In [17]:
```

```
---------------------------------------------------------------------------
TypeError                                 Traceback (most recent call last)
Cell In[17], line 1
----> 1 str[0:4]='holla'

TypeError: 'str' object does not support item assignment
```

```
In [19]:  i=10
          i

Out[19]:  10

In [20]:  type(i)

Out[20]:  int

In [21]:  f=15.6
          f

Out[21]:  15.6

In [22]:  type(f)

Out[22]:  float

In [23]:  print(i)
          print(f)

          10
          15.6

In [24]:  print(i+f)

          25.6

In [25]:  c=10+20j
          d=20+30j
          c+d

Out[25]:  (30+50j)
```

```
In [26]: type(c)
         type(d)
```

Out[26]: complex

```
In [28]: str="hello"
         print(str[0])
         print(str[1])
         print(str[2])
         print(str[3])
         print(str[4])
```

h
e
l
l
o

```
In [29]: str="hello"
         print(str[-1])
         print(str[-2])
         print(str[-3])
         print(str[-4])
         print(str[-5])
```

o
l
l
e
h

```
In [30]: str[2:4]
```

Out[30]: 'll'

```
In [31]: str[::3]
```

Out[31]: 'hl'

update and delete

```
In [32]: str="good morning"
         str
```

Out[32]: 'good morning'

```
In [33]: str[0:5]='HLW'
```

```
---------------------------------------------------------------------------
TypeError                                 Traceback (most recent call last)
Cell In[33], line 1
----> 1 str[0:5]='HLW'

TypeError: 'str' object does not support item assignment
```

```
In [35]: str[2:5]='H','l'
```

```
-------------------------------------------------------------------------
TypeError                                 Traceback (most recent call last)
Cell In[35], line 1
----> 1 str[2:5]='H','l'

TypeError: 'str' object does not support item assignment
```

In [36]: `del str`
`print(str)`

<class 'str'>

In [37]: `str1="hello"`
`str2="python"`
`print(str1+str2)`

hellopython

In [39]: `True+False`

Out[39]: 1

In [41]: `True+True`

Out[41]: 2

In [42]: `False+False`

Out[42]: 0

In [43]: `False+True`

Out[43]: 1

In [44]: `1 & 1`

Out[44]: 1

In [45]: `1 & 0`

Out[45]: 0

In [46]: `1 & 1`

Out[46]: 1

In [47]: `0 & 1`

Out[47]: 0

In [ ]: