Casting:- You have define Variables type is known as casting.

int, float, str

In [1]:

```
x=int(3)
y=int(2.3)
z=int("3")
print(x)
print(y)
print(z)
```

```
3
2
3
```

In [2]:

```
x=float(3)
y=float(2.3)
z=float("3")
print(x)
print(y)
print(z)
```

```
3.0
2.3
3.0
```

In [3]:

```
x=str(3)
y=str(2.3)
z=int("3")
print(x)
print(y)
print(z)
```

```
3
2.3
3
```

String:- Always written in single or double quoted form

In [4]:

```
a='Python is Amazing'
print(a)
print(type(a))
```

```
Python is Amazing
<class 'str'>
```

In [5]:

```
a="Python's applications are Amazing"
print(a)
print(type(a))
```

```
Python's applications are Amazing
<class 'str'>
```

Slicing of string

In [6]:

```
a="Python's applications are Amazing"
print(a[:-1])
```

```
Python's applications are Amazin
```

In [7]:

```
a[:6]
```

Out[7]:

```
'Python'
```

In [8]:

```
a[-7:]
```

Out[8]:

```
'Amazing'
```

In [9]:

```
a[-11:-7]
```

Out[9]:

```
'are '
```

In [10]:

```
a[9:21]
```

Out[10]:

```
'applications'
```

Modifying String

In [11]:

```
a.upper()
```

Out[11]:

```
"PYTHON'S APPLICATIONS ARE AMAZING"
```

In [12]:

```
a.lower()
```

Out[12]:

```
"python's applications are amazing"
```

Strip:- Removes space from begining

In [13]:

```
a="   Python is Easy"
print(a)
print(a.strip())
```

```
   Python is Easy
Python is Easy
```

Replace

In [14]:

```
s=" You are brave"
s.replace('You',"HE")
```

Out[14]:

```
' HE are brave'
```

In [15]:

```
s.replace('are','is')
```

Out[15]:

```
' You is brave'
```

In [16]:

```
s.replace(' ','')
```

Out[16]:

```
'Youarebrave'
```

split

In [17]:

```
a="Python's applications are Amazing"
print(a.split())
```

```
["Python's", 'applications', 'are', 'Amazing']
```

Concatenate

In [18]:

```
a="Python's applications are Amazing"
b="   Python is Easy"
print(a +' '+ b.strip())
```

```
Python's applications are Amazing Python is Easy
```

format

In [19]:

```
age=36
txt="My name is Shiv & I am " + age
print(txt)
```

```
---------------------------------------------------------------------------
--
TypeError                                 Traceback (most recent call las
t)
Input In [19], in <cell line: 2>()
      1 age=36
----> 2 txt="My name is Shiv & I am " + age
      3 print(txt)

TypeError: can only concatenate str (not "int") to str
```

we cannot combine number & string as above. for that we have to use format.

In [20]:

```
age=36
txt="My name is Shiv & I am {}"
print(txt.format(age))
```

```
My name is Shiv & I am 36
```

In [21]:

```
quantity = 3
itemno = 567
price = 49.95
myorder = "I want to pay {2} Rs for {0} pieces of item {1}."
print(myorder.format(quantity, itemno, price))
```

```
I want to pay 49.95 Rs for 3 pieces of item 567.
```

Escape

In [22]:

```
a="I am "Shiv" & I am 24 yr old"
print(a)
```

```
  Input In [22]
    a="I am "Shiv" & I am 24 yr old"
              ^
SyntaxError: invalid syntax
```

In [23]:

```
a="I am \"Shiv\" & I am 24 yr old"
print(a)
```

```
I am "Shiv" & I am 24 yr old
```