

## intro\_\_

May 20, 2024

```
[1]: num = 10  
     print(type(num))
```

<class 'int'>

```
[2]: "convert num to string"  
     num= str(num)  
     print(type(num), num)
```

<class 'str'> 10

```
[4]: name='noha'  
     name = bool(name)  
     print(name)
```

True

```
[5]: year = '2024'  
     print(type(year), year)
```

<class 'str'> 2024

```
[6]: year = int(year)  
     print(type(year), year)
```

<class 'int'> 2024

```
[7]: name='noha'  
     name = int(name)
```

-----  
ValueError

Traceback (most recent call last)

Cell In[7], line 2

1 name='noha'

----> 2 name = int(name)

ValueError: invalid literal for int() with base 10: 'noha'

```
[8]: grade= '44.44'  
     grade = float(grade)  
     print(grade, type(grade), grade)
```

44.44 <class 'float'> 44.44

Arithmetic operators

```
[9]: num1= 10
```

```
[10]: num2= 20  
      res = num1 + num2  
      print(res)
```

30

```
[13]: num3 = 10//3  # integer result of the division  
      print(num3)
```

3

```
[15]: print(10/3)  # 3.333333  
      print(10%3) # 1
```

3.3333333333333335

1

```
[11]: year = 2024 # assign variable to a value
```

```
[16]: num =11  
      print(num)  
      num +=10  
      print(num)
```

11

21

```
[17]: num1=4  
      num2=3  
      res = num1 ** num2  
      print(res)
```

64

```
[18]: num1 **= 4
```

```
[19]: print(num1)
```

256

```
[20]: name = 'ahmed'
      if name != 'ahmed':
          print("found")
```

```
[ ]: if not(name=='ahmed'):
      print("--- not found")
```

```
[21]: grade =90
      course = 'python'

      if not(grade!=90 and course!='python'):
          print("--failed")
```

--failed

```
[22]: res = 10 and 'iti' # True
      print(res)

      print(10 and 'iti')
```

iti  
iti

```
[23]: print(bool(10))
```

True

```
[24]: print(bool('iti'))
```

True

```
[25]: """ and operator --> make sure that all the expression parts
      represent True
      10 and iti  ---> iti represent True
      """
```

```
[25]: ' and operator --> make sure that all the expression parts \nrepresent True \n10
      and iti  ---> iti represent True\n'
```

```
[26]: print(10 and 0 and 'iti')
```

0

```
[27]: day = 'monday'
      if day=='sunday':
          print("-- this is the beginning of the week")
      elif day == 'firday':
          print("--End of the week")
      else:
          print("--it seems impossible until it is done")
```

--it seems impossible until it is done

[ ]: