## **Numbers and Strings**

```
In [1]: 4
Out[1]: 4
In [2]: 4 + 18
Out[2]: 22
In [4]: 5 + 18
Out[4]: 23
In [6]: 5 + 20
Out[6]: 25
In [7]: 4 * 18
Out[7]: 72
In [8]: 18 / 4
Out[8]: 4.5
In [9]: 18 / 6
Out[9]: 3.0
In [10]: int(18 / 6)
Out[10]: 3
In [11]: int(18/4)
Out[11]: 4
In [12]: 21 % 4
Out[12]: 1
In [13]: 21 % 3
Out[13]: 0
In [14]: 2 ** 2
Out[14]: 4
```

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In [15]: 2 ** 3
Out[15]: 8
In [16]: 21 / 4
Out[16]: 5.25
 In [3]: 21 // 4
 Out[3]: 5
 In [4]: print(7 * 2.0)
        14.0
 In [5]: print(9//2)
        4
In [13]: pizza_price = 140
         pizza_num = 12
         doogh_price = 400
         doogh_number = 6
         ja_price = 4850
         ja_number = 3
In [14]: kolle_kharj = (pizza_price * pizza_num) + (doogh_price * doogh_number ) + (ja_price
In [15]: print(kolle_kharj)
        18630
In [16]: a = 'Erfan'
In [17]: a = a + a
In [18]: a
Out[18]: 'ErfanErfan'
In [21]: r = 6.5
         p = 3.14
         Masahat = p * (r**2)
         print(Masahat)
        132.665
In [22]: x = 10
         y = 5
         z = x + y
         print(z)
        15
```

```
In [23]: name = "Ali"
         age = 25
         print(name, age)
        Ali 25
 In [3]: Name = "Erfan"
         LastName = "Najafi"
         print("Hello " + Name + " " +LastName)
        Hello Erfan Najafi
 In [4]: VideoGame = "Last Of Us"
 In [5]: VideoGame
 Out[5]: 'Last Of Us'
 In [6]: VideoGame[3]
 Out[6]: 't'
 In [9]: VideoGame[5:7]
 Out[9]: 'Of'
In [10]: VideoGame[-1]
Out[10]: 's'
In [11]: VideoGame[-2]
Out[11]: 'U'
In [16]: NumbersForList = "0123456789"
In [17]: NumbersForList
Out[17]: '0123456789'
In [18]: NumbersForList[4]
Out[18]: '4'
In [19]: NumbersForList[2:6]
Out[19]: '2345'
In [21]: NumbersForList[2:9:2]
Out[21]: '2468'
In [25]: NumbersForList[1:9:2]
```

```
Out[25]: '1357'
In [26]: NumbersForList[3:]
Out[26]: '3456789'
In [27]: NumbersForList[::]
Out[27]: '0123456789'
In [28]: NumbersForList[::-1]
Out[28]: '9876543210'
In [30]: """Hi my name is Erfan
         I'm programmer and also tattoo artist
         Thnks for listening to me"""
Out[30]: "Hi my name is Erfan\nI'm programmer and also tattoo artist\nThnks for listening t
          o me"
In [33]: Text1 = "Hi this is a text abot how live \"PLEASE BE KINE WHIT PEOPLE\""
In [34]: print(Text1)
        Hi this is a text abot how live "PLEASE BE KINE WHIT PEOPLE"
In [49]: Game = "iran"
In [50]: Game
Out[50]: 'iran'
In [51]: Game = "I" + Game[1:]
In [52]: Game
Out[52]: 'Iran'
In [53]: Game = Game[0:2] + "A" + Game[-1]
In [54]: Game
Out[54]: 'IrAn'
In [55]: Village = "Irag"
In [56]: Village.upper()
Out[56]: 'IRAG'
In [57]: Village
```

```
Out[57]: 'Irag'
In [58]: Village = Village.upper()
In [59]: Village
Out[59]: 'IRAG'
In [60]: Village.lower()
Out[60]: 'irag'
In [61]: Village
Out[61]: 'IRAG'
In [62]: Village = Village.lower()
In [63]: Village
Out[63]: 'irag'
In [65]: Village.index("a")
Out[65]: 2
In [73]: try:
             print(Village.index("as"))
         except:
             print("We Don't have")
        We Don't have
In [74]: WhatErfanLikes = "Bita, Video Game, Programming, Story, TQ"
In [75]: WhatErfanLikes
Out[75]: 'Bita, Video Game, Programming, Story, TQ'
In [76]: WhatErfanLikes.split(",")
Out[76]: ['Bita', ' Video Game', ' Programming', 'Story', 'TQ']
In [77]: ListOfLike = WhatErfanLikes.split(",")
In [78]: type(ListOfLike)
Out[78]: list
In [79]: ListOfLike[0]
Out[79]: 'Bita'
```

```
In [80]:
          Name
Out[80]: 'Erfan'
In [81]:
          LastName
Out[81]: 'Najafi'
In [84]: print("Hello %s %s" %(Name, LastName))
         Hello Erfan Najafi
In [85]: age = 24
In [86]: print("Hello %s %s you are %i" %(Name, LastName, age))
         Hello Erfan Najafi you are 24
In [88]: print("Hello {} {} you are {}".format(Name, LastName, age))
         Hello Erfan Najafi you are 24
In [89]: | print("Last Name : {1}\nFiest Name : {0}\nAge : {2}".format(Name,LastName,age))
         Last Name : Najafi
         Fiest Name : Erfan
         Age : 24
In [91]: Game1 = "Gta v"
          Game2 = "Rianbow"
          Game3 = "Call of duty"
In [93]: print("My fivarot game is {G1} then {G2} and finally {G3}".format(G1=Game3,G2=Game1
         My fivarot game is Call of duty then Gta v and finally Rianbow
In [95]: print("This is number you like = {Nu:1.1f}".format(Nu = 4.32455655)) #when you use
         This is number you like = 4.3
In [98]: age = 24.5645445
In [99]: print(f"Last Name : {LastName}\nFiest Name : {Name}\nAge : {age}")
         Last Name : Najafi
         Fiest Name : Erfan
         Age: 24.5645445
In [102...
         print(f"Last Name : {LastName}\nFiest Name : {Name}\nAge : {age:1.1f}")
         Last Name : Najafi
         Fiest Name : Erfan
         Age : 24.6
In [103...
          Name
Out[103...
           'Erfan'
```

```
In [106...
          Name.count
Out[106...
           <function str.count>
In [107...
          len(Name)
Out[107...
           5
In [108...
          len(LastName)
Out[108...
In [109... text = "Python"
           print(text[-1])
In [113...
          متفاده از متد رشته خروجی دهد Lower case کدی بنویسید که رشته زیر را در ابتدا به شکل : Ex #
          #x = 'Hi this is a string'
           x = 'Hi this is a string'
           x = x.lower()
          x = x.split("")
           print(x)
         ['hi', 'this', 'is', 'a', 'string']
```