iac-27-lec1

March 7, 2023

[5]:
```
1 + 5 * 6  + 10/3
```

[5]:
```
36.0
```

[6]:
```
10 / 3
```

[6]:
```
3.3333333333333335
```

[7]:
```
10 // 3
```

[7]:
```
3
```

[8]:
```
10 - 5
```

[8]:
```
5
```

[9]:
```
5 ** 6
```

[9]:
```
15625
```

[10]:
```
10 * 3
```

[10]:
```
30
```

[11]:
```
10 ** 3
```

[11]:
```
1000
```

[12]:
```
30 % 4
```

[12]:
```
2
```

[13]:
```
x = 30 % 4
```

[14]:
```
x
```

[14]:
```
2
```

[15]:
```
x + 10
```

[15]: 12

[16]:
```
if = x + 10
```

[17]:
```
x
```

[17]: 12

[19]:
```
print('The value of x is ', x)
```

```
The value of x is  12
```

[20]:
```
# data types
x = 10 / 3
```

[21]:
```
x
```

[21]: 3.3333333333333335

[22]:
```
type(x)
```

[22]: float

[23]:
```
y = 20 * 3
type(y)
```

[23]: int

[25]:
```
string_val = 'This is a string. '
type(string_val)
```

[25]: str

[32]:
```
string_val_2 = "I am new to programming."
```

[33]:
```
print(string_val_2)
```

```
I am new to programming.
```

[35]:
```
string_concat = string_val + string_val_2
```

[36]:
```
print(string_concat)
```

```
This is a string. I am new to programming.
```

[40]:
```
word_10 = "word," * 10
```

[41]:
```
word_10
```

[41]:
```
'word,word,word,word,word,word,word,word,word,word,'
```

[47]:
```
print(x, y, sep=", ")
```

```
3.3333333333333335, 60
```

[48]:
```
# input function
```

[52]:
```
# input an integer and add 5 with it.
print("Please input an integer")
x = input()
```

```
Please input an integer
100
```

[53]:
```
print(x)
```

```
100
```

[54]:
```
type(x)
```

[54]:
```
str
```

[57]:
```
x + "02"
```

[57]:
```
'10002'
```

[58]:
```
len(x)
```

[58]:
```
3
```

[59]:
```
len(string_val)
```

[59]:
```
18
```

[60]:
```
type(x)
```

[60]:
```
str
```

[61]:
```
x_int = int(x)
```

[62]:
```
type(x_int)
```

[62]:
```
int
```

[63]:
```
x_int
```

[63]: 100

[65]:
```
x_int + 10
```

[65]: 110

[68]:
```
print("Please enter the first number")
x1 = input()
print("please enter the second number")
x2 = input()
result = float(x1) + float(x2)
print("Result of Addition: ", result)
```

```
Please enter the first number
100.2
please enter the second number
.7
Result of Addition:  100.9
```

[69]:
```
type(result)
```

[69]: float

[70]:
```
result_str = str(result)
type(result_str)
```

[70]: str

[82]:
```
print("Please enter the first number")
x1 = float(input())
print("please enter the second number")
x2 = float(input())
res = x1 == x2
print("if equal: ", res)
```

```
Please enter the first number
10
please enter the second number
11
if equal:  False
```

[83]:
```
int(res)
```

[83]: 0

[90]:
```
# relational operator
print("Please enter the first number")
x1 = float(input())
print("please enter the second number")
x2 = float(input())
res = x1 <= x2
print("if not equal: ", res)
```

```
Please enter the first number
4
please enter the second number
5
if not equal:  True
```

[95]:
```
# boolean operator
res = False or True
print(res)
```

```
True
```

[1]:
```
x3 = float(input())
if x3 > 5 and x3 < 10: # False
    print("You have given the correct number")
elif x3 == 10:
    print("you have given 10")
else:
    print("you have given the wrong number")
```

```
10
you have given 10
```

[ ]:
```

```