In [11]:
```
print('Programming', end=' - ')
print('Python')
```

```
Programming - Python
```

In [12]:
```
# 05:42:30
```

In [15]:
```
print(5, 42, 30, sep=':')
```

```
5:42:30
```

In [ ]:
```

```

In [26]:
```
# len(30)
```

In [20]:
```
p = len('some action')
```

In [21]:
```
print(p)
```

```
11
```

In [22]:
```
type(p)
```

Out[22]:
```
int
```

In [ ]:
```

```

In [36]:
```
x, y, *z = "1234"
```

In [37]:
```
z
```

Out[37]:
```
['3', '4']
```

In [43]:
```
x = 5; y = 10; z = 15
```

In [44]:
```
print(x, y, z)
```

```
5 10 15
```

In [39]:
```
x = y = z = 15
```

In [45]:
```
x, y, z = 5, 10, [4, 7, 8]
```

In [49]:
```
type(x)
```

Out[49]:
```
int
```

In [42]:
```
type(x)
```

Out[42]:
```
tuple
```

In [ ]:
```

```

In [58]:
```
import sys
```

In [59]:
```
type(sys)
```

Out[59]:
```
module
```

In [61]:
```
# help(sys)
```

In [ ]:
```

```

In [62]:
```
# int, float, complex
```

In [65]:
```
# import numbers
```

In [64]:
```
# numbers.
```

In [66]:
```
x = int(3233)
```

In [67]:
```
x
```

Out[67]:
```
3233
```

In [68]:
```
bin(10)
```

Out[68]:
```
'0b1010'
```

In [69]:
```
# 0b or 0B
# 0o or 0O
# 0x or 0X
```

In [70]:
```
hex(10)
```

Out[70]:
```
'0xa'
```

In [71]:
```
oct(8)
```

Out[71]:
```
'0o10'
```

In [73]:
```
chr(90)
```

Out[73]:
```
'Z'
```

In [74]:
```
ord('Z')
```

Out[74]:
```
90
```

In [75]:
```
pow(2, 5)
```

Out[75]:
```
32
```

In [76]:
```
x = float(43223.34)
```

In [77]:
```
x = 5j
```

In [ ]:
```

```

In [79]:
```
# 0, 0.0, 0j
```

In [82]:
```
x = bool()
```

In [83]:
```
x
```

Out[83]:
```
False
```

In [ ]:
```

```

In [85]:
```
# print, help, type, len, pow, chr, ord, hex, oct, bin

# int, float, complex
# str
# bool

# None, True, False
```

In [93]:
```
# Flase, None
# 0, 0.0, 0j
# ""
# [], (), {}
# set()
```

In [94]:
```
b = bool(None)
```

In [95]:
```
b
```

Out[95]: False

In [ ]:
```

```

In [96]:
```
# Python Outputs
```

In [97]:
```
# Python Type Conversion
```

In [105]:
```
gpa = float(input("Enter gpa: "))
```

In [107]:
```
type(gpa)
```

Out[107]: float

In [109]:
```
gpa + 0.2
```

Out[109]: 3.9000000000000004

In [ ]:
```

```

In [ ]:
```

```

In [111]:
```
x = 4.6556643
```

In [117]:
```
y = int(x)  # Type casting
```

In [118]:
```
y
```

Out[118]: 4

In [119]:
```
z = bool(343)
```

In [120]:
```
z
```

Out[120]: True

In [ ]:
```

```

In [121]:
```
value = '-3.6'
```

In [123]:
```
new_value = float(value)
```

In [124]:
```
new_value
```

Out[124]: -3.6

In [ ]:
```

```

In [148]:
```
h = hex(10)
```

In [150]:
```
# type(h)
```

Python String Manipulation

In [126]:
```
name = 'umair'  # string variable
```

In [128]:
```
type(name)
```

Out[128]: str

In [131]:
```
# Access --- Indexing
```

In [136]:
```
# str.replace?
```

In [138]:
```
# name[4] = 'B'
```

In [ ]:
```

```

In [ ]:
```

```