Data Type Boolen

In [1]:
```
True
```

Out[1]: True

In [2]:
```
true
```

```
---------------------------------------------------------------------------
NameError                                 Traceback (most recent call last)
Cell In[2], line 1
----> 1 true

NameError: name 'true' is not defined
```

In [ ]:
```

```

In [3]:
```
fales
```

```
---------------------------------------------------------------------------
NameError                                 Traceback (most recent call last)
Cell In[3], line 1
----> 1 fales

NameError: name 'fales' is not defined
```

In [4]:
```
False
```

Out[4]: False

In [7]:
```
b=True # in this Scenario i have to Take as True=1 And False=0
b1=False
```

In [6]:
```
b+b1
```

Out[6]: 1

In [8]:
```
b-b1
```

Out[8]: 1

In [9]:
```
b*b1
```

Out[9]: 0

In [10]:
```
b1//b
```

Out[10]: 0

b1/b

b1/b

In [11]:
```
c=5
d=10
c/d
```

Out[11]: 0.5

In [12]:
```
c//d
```

Out[12]: 0

In [13]:
```
e=10
f=20
e/f
```

Out[13]: 0.5

g=20 h=40 g/h

In [14]:
```
a=10
b=20
a/b
```

Out[14]: 0.5

In [15]:
```
a//b
```

Out[15]: 0

Complex Number

c1=10+20j # In this Scenario we have take as 10= Real Value ,And 20j=Imaginary Value

c1

In [16]:
```
c1
```

```
---------------------------------------------------------------------------
NameError                                 Traceback (most recent call last)
Cell In[16], line 1
----> 1 c1

NameError: name 'c1' is not defined
```

In [17]:
```
d1=10+20j # In This Case We have Take as 10=Real Value And 20j=Imaginary Value
d1
```

Out[17]: (10+20j)

In [18]:
```
d2=3+5j
d2
```

Out[18]: (3+5j)

In [19]:
```
d1+d2
```

Out[19]: (13+25j)

Python Type Casting Or Type Conversion

1.Integar Conversion

In [20]:
```
int(3.4)
```

Out[20]: 3

In [21]:
```
int(3.4,5.7) # In this case we have to taken as one arugment or one parameter is
```

```
---------------------------------------------------------------------------
TypeError                                 Traceback (most recent call last)
Cell In[21], line 1
----> 1 int(3.4,5.7)

TypeError: 'float' object cannot be interpreted as an integer
```

In [22]:
```
int(true)
```

```
---------------------------------------------------------------------------
NameError                                 Traceback (most recent call last)
Cell In[22], line 1
----> 1 int(true)

NameError: name 'true' is not defined
```

In [23]:
```
int(True)
```

Out[23]: 1

In [24]:
```
int(False)
```

Out[24]: 0

In [25]:
```
print(int(3.4))
print(int(True))
print(int(10+20j))
```

```
3
1
---------------------------------------------------------------------------
TypeError                                 Traceback (most recent call last)
Cell In[25], line 3
      1 print(int(3.4))
      2 print(int(True))
----> 3 print(int(10+20j))

TypeError: int() argument must be a string, a bytes-like object or a real number,
not 'complex'
```

In [1]:
```
# Interview Question Given By Praksh Senapati SIr
```

Question & An

1. What is the type of the following: 1

A) float B) int C) str Answer: int Explanation: As there is no decimal, the number is of type int 2. What is the type of the following "7.1" A) float B) int C) str Answer: str Explanation: The type is string 3. What is the result of the following code segment: int(12.3) A) 12.3 B) 12 C) 13 Answer: 12 Explanation: In Python, if you cast a float to an integer, the conversion truncates towards zero. 4. What is the result of the following code segment: int(True) A) 1 B) 0 C) error Answer: 1 Explanation: When you cast a boolean True to an integer you get a 1 5. What do you call a value that doesn't have decimal values? A) A number B) An integer C) A string Answer: An integer 6. What do you call a value that does have decimal values? A) A float B) A number C) An integer Answer: A float 7. What data type can only have either a value of True or False? A) A string B) A boolean C) An integer Answer: A boolean 8. What code would turn the string "1" into an integer? A)str(1) B) int("1") C) float("1") Answer: int("1") 9. What character begins a single line comment? A)''' B) // C) # Answer:# 10. What do we call it when we convert from one data type to another? A)casting B) converting C) changing Answer:casting 11. What is the datatype of np.nan? A) int B) float C) str D) None Answer: float 12. Which of the following numbers is NOT a float? A) 1.5 B) 2.333333 C) 0.0 D) 0 Answer: 0 Explanation:0 on its own is an int. 0.0 however, is a float. 13. What values can the Boolean data type hold? A) Integers, fractions, complex numbers B) Unicode characters C) True or False values D) Any other data type Answer: True or False values 14. WWhat does it mean that Python is a dynamically-typed language? A) Variables in python can implicitly change to other types when comparing. For examples you can compare B) Python variables can be assigned to different types and changes types at will. C) Python is a more efficient language than C++ D) All of the above Answer: Python variables can be assigned to different types and changes types at will.

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