assignment1

August 27, 2023

```python
[2]: s = "kshitij"
```

```python
[3]: type(s)
```

```
[3]: str
```

```python
[4]: l = ["kshitij", "18", "data science", "2.0", True]
```

```python
[5]: type(l)
```

```
[5]: list
```

```python
[6]: n = 23.567
```

```python
[7]: type(n)
```

```
[7]: float
```

```python
[8]: t = ("kshitij", 18, "data science", 2.0, True)
```

```python
[9]: type(t)
```

```
[9]: tuple
```

```python
[10]: var1 = ''
```

```python
[11]: type(var1)
```

```
[11]: str
```

```python
[12]: var2 = '[DS,ML,Python]'
```

```python
[13]: type(var2)
```

```
[13]: str
```

```python
[14]: var3 = ['DS','ML','Python']
```

```
[15]: type(var3)
```

```
[15]: list
```

```
[16]: var4 = 1
```

```
[17]: type(var4)
```

```
[17]: int
```

```
[18]: a = 20
      b = 10
      c = 20/10
```

```
[19]: c
```

```
[19]: 2.0
```

```
[20]: a1 = 20
      b1 = 10
      c1 = 20%10
```

```
[21]: c1
```

```
[21]: 0
```

```
[22]: a2 = 20
      b2 = 10
      c2 = 20//10
```

```
[23]: c2
```

```
[23]: 2
```

```
[24]: a4 = 20
      b4 = 10
      c4 = 20**10
```

```
[25]: c4
```

```
[25]: 10240000000000
```

```
[26]: l1 = ["kshitij", 18, 15+4j, True, [1,2,3,4,4], (2,4,5,6), 23.456,
       ↪[1,2,3,(4,5,6),7,9], False, "me"]
```

```
[30]: for i in l1:
          print(i)
```

```
kshitij
18
(15+4j)
True
[1, 2, 3, 4, 4]
(2, 4, 5, 6)
23.456
[1, 2, 3, (4, 5, 6), 7, 9]
False
me
```

[1]:
```python
a = int(input())
b = int(input())
count = 0
while a%b == 0:
    a = a//b
    count+=1
if count>0:
    print(f"{a} is divisible by {b} a total of {count} times")
else:
    print(f"{a} is not divisible by {b}")
```

```
 23
 34

23 is not divisible by 34
```

[2]:
```python
l2 = [1,2,3,4,6,8,9,21,12,45,67,89,90,45,32,33,99,66,54,30,5,6,7,8,9]
```

[4]:
```python
for i in l2:
    if i%3 == 0:
        print("divisible by 3")
    else:
        print("not divisible by 3")
```

```
not divisible by 3
not divisible by 3
divisible by 3
not divisible by 3
divisible by 3
not divisible by 3
divisible by 3
divisible by 3
divisible by 3
divisible by 3
not divisible by 3
not divisible by 3
divisible by 3
```

```
divisible by 3
not divisible by 3
divisible by 3
divisible by 3
divisible by 3
divisible by 3
divisible by 3
not divisible by 3
divisible by 3
not divisible by 3
not divisible by 3
divisible by 3
```

[5]: `l2`

[5]:
```
[1,
 2,
 3,
 4,
 6,
 8,
 9,
 21,
 12,
 45,
 67,
 89,
 90,
 45,
 32,
 33,
 99,
 66,
 54,
 30,
 5,
 6,
 7,
 8,
 9]
```

[6]: `l2[3] = 5`

[7]: `l2`

[7]:
```
[1,
 2,
```

```
  3,
  5,
  6,
  8,
  9,
  21,
  12,
  45,
  67,
  89,
  90,
  45,
  32,
  33,
  99,
  66,
  54,
  30,
  5,
  6,
  7,
  8,
  9]
```

[11]:
```python
t1 = ("kshitij", 18, "data science", 2.0, True)
```

[12]:
```python
t1[1] = 19
```

```
---------------------------------------------------------------------------
TypeError                                 Traceback (most recent call last)
Cell In[12], line 1
----> 1 t1[1] = 19

TypeError: 'tuple' object does not support item assignment
```

[ ]: