Assignment 01

August 2, 2024

```
[1]: #ASSIGNMENT 01
```

Create one variable using following data types string list float tuple

```
[2]: a="parikshit"
```

```
[3]: a
```

```
[3]: 'parikshit'
```

```
[4]: type(a)
```

```
[4]: str
```

```
[5]: b=[1,3,5,6,8,9,"parikshit",]
```

```
[6]: b
```

```
[6]: [1, 3, 5, 6, 8, 9, 'parikshit']
```

```
[7]: type(b)
```

```
[7]: list
```

```
[8]: c=234.345
```

```
[9]: c
```

```
[9]: 234.345
```

```
[10]: type(c)
```

```
[10]: float
```

```
[11]: d=(2,4,5)
```

```
[12]: d
```

`[12]:` (2, 4, 5)

`[13]:` `type(d)`

`[13]:` tuple

Checking the data types of the given variables var1 = ' ' var2 = '[DS , ML , Python]' var3 = ['DS' , 'ML' , 'Python'] var4 = 1

`[14]:` `a=''`

`[21]:` `type(a)`

`[21]:` str

`[22]:` `b='DS,ML,Python'`

`[23]:` `type(b)`

`[23]:` str

`[25]:` `c=['DS','ML','Python']`

`[26]:` `type(c)`

`[26]:` list

`[27]:` `d=1`

`[28]:` `type(d)`

`[28]:` int

Explain the use of following opeartors using examples / // **/ is an arithmetic operator used for division as shown below 10 on division with 2 gives 5 .

`[34]:` `10/2`

`[34]:` 5.0

`[30]:` `10%2`

`[30]:` 0

// it is a division floor it rounds the result to nearest whole number , as given below basically quotient that is 3 as 3*3 is 9 on further dividing it will result in points so its rounding off till 3 only.

[32]: `11//3`

[32]: 3

** it is an power operator used for solving power questions or something related as it basically tells u the power of the number and how many times , as given below power of 2 , 3 times is 2*2 which is 4 further*2 which is 8. 2**3 = 2*2*2

[35]: `2**3`

[35]: 8

Create a list of length 10 of your choice containing multiple types of data. Using for loop print the element and its data type.

[36]: `z=[1,2,3,4,5,'parikshit',5+7j,True,13.54,100]`

[44]: `z`

[44]: `[1, 2, 3, 4, 5, 'parikshit', '5+7j', True, 13.54, 100]`

[45]:
```python
for i in z:
    print(i)
```

```
1
2
3
4
5
parikshit
5+7j
True
13.54
100
```

[46]:
```python
for i in z:
    print(i)
    print(type(i))
```

```
1
<class 'int'>
2
<class 'int'>
3
<class 'int'>
4
<class 'int'>
5
```

```
<class 'int'>
parikshit
<class 'str'>
5+7j
<class 'str'>
True
<class 'bool'>
13.54
<class 'float'>
100
<class 'int'>
```