Jupyter Notebook (to-remember)

Commands:

Print – print ()
Input – Input (“”)
Concatenation – string + string

Note = string is a data type which can be text, number, or symbol (anything). It can be joined to other strings but a string that is a number cannot be used for calculations.

Error → Nonetype – undefined data type.

Boolean – True/false (only two formats)

Numeric - Integer

Represents range of mathematical integer numbers.

Whole number (not a fraction) that can be positive, negative, or zero. E.g.: 565, -55, 0.

Works similar as in other programming languages.

Syntax: Variable_Name = Value

Define a variable that can store the value.

- A variable can have any name.

```
# Creating a variable x which stores a value of 5
x = 5
```

Execute the previous cells for the future ones to work.

```
# To check, specify the variable name or use print function, either of the following works fine: x or print(x)
x
print (x)
```

Two way to print and see an output.

- X
- Print (x)

```
# Creating a variable x which stores a value of 5
x = 5

# To check, specify the variable name or use print function, either of the following works fine: x or print(x)
x

# Another example
y = -2


# Let's try some arithmetic operations - add, subtract, multiply and divde are variable names, which stores the
# result values for addition, subtraction, multiplication and division respectively
add = x+y
subtract = x-y
multiply = x*y
divide = x/y

print("Addition value is:", add)
print("Subtraction value is:", subtract)
print("Multiplication value is:", multiply)
print("Divison value is:", divide)
```

```
Addition value is: 3
Subtraction value is: 7
Multiplication value is: -10
Divison value is: -2.5
```

If it is just about giving the numbers and no instructions then there won't be any need for strings to be in commas however, if you are trying to describe the work you are doing then the string should be in commas and the rest can just go normal.

Numeric - Float

Represents range of mathematical rational numbers.

Values are specified with a decimal point. E.g. - 56.5, 10.686.

Exponential notation: 'e'/'E' followed by a positive or negative integer value may be appended to specify scientific notation. e.g. - 1e6, 5.6e-5,

Syntax: Variable_Name = Value

In [7]: Slide Type Sub-Slide

```
# Creating a variable f1 which stores a value of 56.5
f1 = 56.5

# To check, specify the variable name or use print function, either of the following works fine: f or print(f)
f1
```

Out[7]: 56.5

In [8]: Slide Type Sub-Slide

```
# Creating a variable f1 which stores a value of 56.5
f1 = 56.5

# To check, specify the variable name or use print function, either of the following works fine: f1 or print(f1)
f1

# Creating a variable f2 which stores a value of 0.00056
f2 = 5.6e-4
f2
```

Out[8]: 0.00056

```
# Creating a variable line1 which stores a string with a single quote
line1 = "my name is dipankar."

# Capitalize a string - use 'capitalize' function
print(line1.capitalize())
```

First, you have to define the value and then call the function followed by a dot
() – helps pass the argument that needs to be printed, if not, then it can be left blank.

Control structures – “if”
Indentation is the main key for Python – indented block error.