# Python ka Chilla

## With Baba Ammar

## How to use Jupyter Notebook

### Basics of Python

**01- My First Program** Ctrl+Shift+p For interpreter if having issues

In [1]:
```
# My First Program of python
print(2+3);
print("I Love Myself");
```

```
5
I Love Myself
```

**02- Operators**

In [2]:
```
print(2+1)
print(13-12)
print(88/8)
print(8*7)
print(33%5)
print(33//3)
print(3**4)


print(3**2/4*2/6+9-1)
```

```
3
1
11.0
56
3
11
81
8.75
```

PEMDAS Parenthesis Exponenets Multiply Divide Add Subtract Left to right sequence M D & A S

**03-Strings**

In [3]:
```
print("My name is Mohsin Farid")
print("I Love Myself")
print("I am From Pakistan")
print("Learning Python with Baba Ammar")
print("Very Easy to understand")
print("Sir Aammar is Brilliant Teacher")
```

```
My name is Mohsin Farid
I Love Myself
I am From Pakistan
Learning Python with Baba Ammar
Very Easy to understand
Sir Aammar is Brilliant Teacher
```

**04-Comments**

ctrl+/ for comments

In [4]:
```
print("My name is Mohsin Farid")
print(8+6) #Add numeric Values
print("I Love Myself")
```

```
My name is Mohsin Farid
14
I Love Myself
```

**05-Variables**

Variables: Objects containing Specific Values

Rules to assign variables

1- should contain letters,numbers, or underscores

2- Don't start with numbers

3- Spaces are not Allowed

4- Don't Use Keywords (break,mean,median,etc....)

5- Short and descriptive

6- Case sensitive (should use lowercase letters)

In [5]:
```
#
x= 5 # numeric variable
print(x)

y = "Python Learning with Baba Ammar" # string variables
print(y)

x = x+10
print(x)
# Updating is done from top to bottom

# Types/class of variables
type(x)
print(type(x))
print(type(y) ) # print_type_class

furit_basket = 8
# del furit_basket
print(furit_basket)
print(type(furit_basket))
```

```
5
Python Learning with Baba Ammar
15
<class 'int'>
<class 'str'>
8
<class 'int'>
```

### 06-Input Variables

In [7]:
```
# furit_basket = "mangoes"
#  print(furit_basket)

#Input Function

furit_basket = input("What is Your favorite Furit ")
print(furit_basket)

# 2nd Stage Input Variables
name = input("What is Your Name?? ")
greetings = "Hello!"
print(greetings, name)

# Another Way of 2nd Stage function

name_student = input("What is Your Name?? ")
print("Hello!", name_student)

# 3rd Stage Input Variables

name_boy = input("What is Your name   ")
age = input("How old are You   ")
greetings = "Hello!"
print(greetings, name_boy, age, "You are so Young")
```

```
What is Your favorite Furit mango
mango
What is Your Name?? mohsin
Hello! mohsin
What is Your Name?? ammar
Hello! ammar
What is Your name   Asif
How old are You   18
Hello! Asif 18 You are so Young
```

### 07-Conditional Logics

In [8]:
```
#  Logical Operators are either "True or False" , "Yes or No" , "0 and 1"
# Equal to                          ==
# Not equal to                      !=
# Greater Then                      >
# Less Then                         <
# Greater Then or Equal to          >=
# Less Then or Equal to             <=

# print(4==4)
# print(4!=4)
# print(5>2)
# print(5<2)
```

```
# print(5>=4)
# print(4<=5)

# Input Variables and Logical Operators
# hammad_age = 4
# age_at_school = 5
# print(hammad_age==age_at_school)

#User Input and Data Type conversition
hammad_age = input("How Old is Hammad : ")
hammad_age = int(hammad_age)
age_at_school = 5
print(hammad_age==age_at_school)
```

```
How Old is Hammad : 15
False
```

### 08-Type Conversition

In [9]:

```
x= 8;
y = 8.25;
z  = "Hello";

# Implicit Conversition
# x= x*y
# y= x+y
# print(x, type(x))
# print(y, type(y))\

# Explicit Conversition
age = input("How old are U  :  ")
print(age, type(int(age)))
```

```
How old are U  :  15
15 <class 'int'>
```

### 09-If Else Elif

In [10]:

```
age = input("Enter Your age : ")
age = int(age)
age_at_school = 5
if age==age_at_school:
    print("Your Kid can get addmission in PG")
elif age> age_at_school:
    print("you should here erliar")
else:
        print("He is to Young")
```

```
Enter Your age : 5
Your Kid can get addmission in PG
```

### 10-Fuctions

In [11]:

```
# There are few ways to define a functions

# 1
# def print_codanics():
#     print("I Love Myself")
#     print("I Love Myself")
```

```
#     print("I Love Myself")\

# print_codanics()


# 2
# def print_text ():
#     text= "I love My whole Family"
#     print(text)
#     print(text)
#     print(text)

# print_text()

# 3
# def age_calculator(age, name):
#     if age==5:
#         print(name,"Can Go to school")
#     elif age>6:
#         print(name,"He should go to Higher School")
#     else:
#         print(name,"is a Baby")

# age_calculator(5, "Rumman")


# 4
# Future Perdictive Functions
def future_age (age):
    new_age = age+10
    return new_age
    print(new_age)


future_predictive_age=future_age(18)
print(future_predictive_age)
```

```
28
```

### 11-Loops

In [13]:

```
# There are two types of loop
# 1- While Loop
# 2-For Loop

# 1-While Loop
# x=0
# while(x<5):
#     print(x)
#     x=x+1


# 2-For loop
# for x in range(4,11):
#     print(x)

#for Loop in array
days = ["Mon","Tue","Wed","Thur","Fri","Sat","Sun"]
for d in days:
    # if (d=="Fri"):break #Breaks the Loop
```

```
    if(d=="Fri"):continue #Skips Curent d
    print(d)
```

```
Mon
Tue
Wed
Thur
Sat
Sun
```

### 12-Import Libraries

In [14]:
```
import math
print(math.pi)
import statistics
x= [ 1989,191819,2000,4048]
print(statistics.mean(x))
```

```
3.141592653589793
49964
```

### 13-TroubleShooting

In [15]:
```
# There are three types of error
# 1- SyntaxError
# prin("i lovr u")
# 2- RuntimeError
# print(25/0)
name = "Mohsin"
print("Hello name")# 3-semantic Error
```

```
Hello name
```