Python ka chilla with Baba Ammar

Test Jupyter_Notebook

Basic of python

01-My_firstprogram

In [2]:
```
print(2+3)
print("Hellow world")
print("We are learning python with Ammar")
```

```
5
Hellow world
We are learning python with Ammar
```

02-Operators

In [4]:
```
print(2+3)
print(8-4)
print(9*3)
print(100/2)
print(100//2)
print(12*23/3+5-4/8//3*4**2)
```

```
5
4
27
50.0
50
97.0
```

PEMDAS Double // is used for whole value single / is used for float value

03-Strings

In [7]:
```
print("Hellow world")
print("We are learning python with Ammar")
print ('test for single cotaion code')
print("test for double cotation code")
print(''' Test for tripple cotaion code ''')
print("what's up")
print('wats up')
```

```
Hellow world
We are learning python with Ammar
test for single cotaion code
test for double cotation code
 Test for tripple cotaion code
what's up
wats up
```

04-Comments

In [9]:
```
print("How are you")
print("we are learning python with Ammar")
print(2+3)  # For Comments ctrl /
```

```
How are you
we are learning python with Ammar
5
```

05-Variables

In [11]:
```
x= 3
print(x)
y = (' We are learning python with Ammar')
print
# Types of variable
type(x)
print(type(x))
print(type(y))

fruit_basket= "Mangoes","Banana"
print(fruit_basket)
```

```
3
<class 'int'>
<class 'str'>
('Mangoes', 'Banana')
```

Rules for assighning variable.

1- variable should contain integers , numbers or underscores.

2- Do not start with numbers.

3- spaces are not allowed.

4- Do not start with Capital letter.

5- Do not use builts function (int,break,mean,media,True).

6- short and descriptive.

06-Input Variables

In [14]:
```
fruit_basket = "Mangoes"
print(fruit_basket)
fruit_basket= input("Which is your favourite fruit")
print (fruit_basket)
```

```
Mangoes
Mangoes
```

In [15]:
```
# input function second stage
name=input('What is your name')
graetings="Hellow!, "
print(graetings,name)
```

```
Hellow!,  Mujahid deen
```

In [16]:
```
name=input('What is your name')
print('Hellow! ',name)
```

```
Hellow!  Mujahid deen
```

In [17]:
```
# (3rd stage)
name = input("What is your name ,")
greatings= ("Hellow!, ")
age= input("What is your age")
greatings= (" You are still young")
print(greatings,name,greatings)
```

```
You are still young Mujahid deen  You are still young
```

07-Conditional Operators

In [19]:
```
age=4
school_age=5
print(age==school_age)
```

```
False
```

In [20]:
```
age = input("How old you are? ")
age= int(age)
school_age= 5
print(age==school_age)
print(type(age))
```

```
False
<class 'int'>
```

Logoical operators are either "True or False", "0 and 1 " , "yes or no"

Equal to ==

Not Equal to !=

less than <

greater than >

less than equal to <=

Greater than equal to >=

08-type_Conversion

In [23]:
```
x = 10
y = 10.9#
z= "Hello!"
print(type(x))
print(type(y))
print(type(z))
```

```
<class 'int'>
<class 'float'>
<class 'str'>
```

In [24]:
```
# Implicit type conversion
x= (x*y)
print(x, "Type of x is: ",type(x))
```

```
109.0 Type of x is:  <class 'float'>
```

In [25]:
```
# Explicit type conversion
age = input("What is your age? ")
age= int(age)
print(age,type(int(age)))
```

```
20 <class 'int'>
```

In [26]:
```
name = input("What is your name ")
print(name, type(str(name)))
```

```
Mujahid deen <class 'str'>
```

09-if_elif_else

In [28]:
```
required_age_at_school = 5
hammad_age= 10
# question: Can hammad jgo to school
if required_age_at_school==hammad_age:
    print("You can join the school")
elif hammad_age > required_age_at_school:
    print("Hammad should go to at higher School ")
elif hammad_age < 2:
        print("You should take care hammad.")
else:
    print("Hammad cannot go to school")
```

```
Hammad should go to at higher School
```

10-functions

In [30]:
```
# defining a functions
# 1
```

```
def print_codanics():
    print("We are learning python with Ammar.")
    print("We are learning python with Ammar.")
    print("We are learning python with Ammar.")
print_codanics()
# 2
def print_codanics():
    text = "We are learning python with Ammar."
    print(text)
    print(text)
    print(text)
print_codanics()
# 3
def print_codanics(text):
    print(text)
    print(text)
    print(text)
print_codanics(" We are enjoy with learning python")
```

```
We are learning python with Ammar.
We are learning python with Ammar.
We are learning python with Ammar.
We are learning python with Ammar.
We are learning python with Ammar.
We are learning python with Ammar.
 We are enjoy with learning python
 We are enjoy with learning python
 We are enjoy with learning python
```

In [31]:
```
# Defining a function with if ,elif and else
def school_calculator(age):
    if age > 5:
        print("You should go to Higher school")
    elif age ==5:
        print("You can go to school")
    else:
        print("now he is still a baby")
school_calculator(2)
```

```
now he is still a baby
```

In [32]:
```
# defining a function future age
def future_age(age):
    new_age= age+12
    return new_age
predicted_age=future_age(8)
print(predicted_age)
```

```
20
```

11-loop

In [5]:
```
x = 0
while (x<5):
     print(x)
     x = x +1
```

```
0
1
2
3
4
```

In [ ]:
```
days=["Mon","Tue","Wed","Thu","Fri","Sat","sun"]
for d in days:
   # if (d=="Fri"): break
    if (d=="Fri"): continue
    print(d)
```

In [3]:
```
# for loop
for x in range (5,10):
     print(x)
days=["Mon","Tue","Wed","Thu","Fri","Sat","sun"]
for d in days:
     print(d)
```

```
5
6
7
8
9
Mon
Tue
Wed
Thu
Fri
Sat
sun
```

12-import Libraries

In [8]:
```
# # If you want to Know value of pi
import math
print("The value of pi is: ",math.pi)
import statistics
x = [12,16,18,11]
print("mean: ",statistics.mean(x))
```

```
The value of pi is:  3.141592653589793
mean:  14.25
```

13-trouble shooting

1) syntax Error (forget a comma)

print(We are learning python with Ammar)

2) zero division error

print(25/0)

3) indetaionError or Unexpected error for

(unexpexted_spaces)

4) Sumentic Error

name= "Ammar"

print("Hello name")

5) Name error

(for wrong name)