python ka chla with baba_ammar

how to use note book

basics of python

01 -My first program

```
In [1]: print(3+3)
        print("hellow world")
```

02 operator

```
In [2]: print(2+3)
        print(2-3)
        print(6/3)
        print(4*3)
        print(13%3)

        5
        -1
        2.0
        12
        1
```

```
In [3]: print(6//2) ##for the gainig whole number

        3
```

```
In [4]: print(2**4) ## for the power

        16
```

```
In [5]: print((8+5)+2*4/9+4+9**2) ## PEMDAS

        98.88888888888889
```

03 -strings

```
In [6]: print("test for single quotes")
        print('test for double quotes')
        print('''test for triple quotes''')
```

```
test for single quotes
test for double quotes
test for triple quotes
```

```
In [7]: print("whats's up")
```

```
whats's up
```

04 -commnet in python

the shortcut key of comment is **(clrt+/)**

```
In [8]: print("ali fatmi")
        # print ("we are learing python") how to write the comment (clrt+/)
        print(2+9)
```

```
ali fatmi
11
```

05-variables

```
In [9]: x = 3
        print(x) ## for the integer


        y= "we are learning python" ## for the string
        print(y)

        x=x+3
        print(x)
```

```
3
we are learning python
6
```

```
In [10]:  type(x) # type of variable
          print(type(x))
```

<class 'int'>

```
In [11]:  fruit_basket ="mangoes,oranges"
          print(fruit_basket)
```

mangoes,oranges

```
In [12]:  print(type(fruit_basket))
```

<class 'str'>

```
In [13]:  fruit_basket = 6
          print(type(fruit_basket))
```

<class 'int'>

06-input variables

```
In [14]:  basket = input("what is favort clour")
          print(basket)
```

what is favort clourgreen
green

```
In [15]:  ## input 2 stage
          name = input("what is name")
          greeting ="hellow"
```

what is nameali

```
In [16]:  print(greeting,name)
```

hellow ali

```
In [17]:  # another stage
          name = input("what is name")
          print("helow",name)
```

what is namefatmi
helow fatmi

```
In [18]: name = input("what is your name ?")
         age = input("how old are u")
         greetings ="hellow"
```

```
what is your name ?ali fatmi
how old are u12
```

```
In [19]: print(greetings,name," ,you are still younge") # another way to use
```

```
hellow ali fatmi   ,you are still younge
```

07-conditional logical operator

```
In [20]: print(4==4)
         print(3!=3)
         print(3<4)
         print(4>5)
         print(3<=4)
         print(4>=5)
```

```
True
False
True
False
True
False
```

```
In [21]: aliage = 5
         schoolage = 6
         print(aliage==schoolage)
```

```
False
```

```
In [22]: ageschool = 5
         x = input("enter age") #input operator
         x =int(x)
         print(ageschool==x) # logical function
```

```
enter age4
False
```

08-type_conversion

In [23]:
```python
x = 10
y =10.8
z= "hellow"
x= x*y ## implict conversinon
print(type(x))
```

```
<class 'float'>
```

In [24]:
```python
age = input("what is your age")
```

```
what is your age6
```

In [25]:
```python
type(age)
```

Out[25]: str

In [27]:
```python
# explicit conversion
age = input("what is your age")
print(age , type(int(age))) # convert to int
```

```
what is your age5
5 <class 'int'>
```

In [28]:
```python
name = input("name")
print(name , type(str(name))) # convet to str
```

```
nameali
ali <class 'str'>
```

09-if else elif`

In [29]:
```python
school_age=5
age = 2
if age==school_age:
    print("i can go school")
elif(age>school_age):
    print("should go high school")
elif(2<=age):
    print("should care")
else :
    print("can not go")
```

```
should care
```

10-functions

```
In [30]: print("my name is fatmi")
         print("my name is fatmi")
         print("my name is fatmi")
         print("my name is fatmi")
```

```
my name is fatmi
my name is fatmi
my name is fatmi
my name is fatmi
```

```
In [31]: def print_fun():  # first method
             print("my name is fatmi")
             print("my name is fatmi")
             print("my name is fatmi")
         print_fun()
```

```
my name is fatmi
my name is fatmi
my name is fatmi
```

```
In [32]: def print_fun(): # second mehtod
             text="my name is fatmi"
             print(text)
             print(text)
         print_fun()
```

```
my name is fatmi
my name is fatmi
```

```
In [33]: def print_fun(text): #  3 mehtod
             print(text)
             print(text)
         print_fun("hellow world")
```

```
hellow world
hellow world
```

```
In [34]: ## defing the function with if else function
         def school_cal(age):
             if age==5:
                 print("yes can go school")
             elif(age>5):
                 print("should go high school")
             else :
                 print("can not go")
         school_cal(6)
```

```
should go high school
```

In [35]:
```python
# Defining the future age
def future_age(age):
    new=age+20
    return new
pridected=future_age(20)
print(pridected)
```

```
40
```

11-loops

In [36]:
```python
#while loops
x=0
while (x<5):
    print(x)
    x=x+1
```

```
0
1
2
3
4
```

In [37]:
```python
#for loops
for x in range(5,10):
    print(x)
```

```
5
6
7
8
9
```

In [38]:
```python
#arry
days =["monday","tuseday","wednesdy","thu","fri","sat","sun"]
for d in days:
    if (d== "fri"):break ## using break statement

    print(d)
```

```
monday
tuseday
wednesdy
thu
```

In [39]:
```python
days =["monday","tuseday","wednesdy","thu","fri","sat","sun"]
for d in days:
    if (d== "fri"):continue # whith continue which skip the fri

    print(d)
```

```
monday
tuseday
wednesdy
thu
sat
sun
```

12-import libaries

In [40]:
```python
import math
print("value of pi is",math.pi
     )
```

```
value of pi is 3.141592653589793
```

In [41]:
```python
import statistics
x=[1,3,6,2,4,4]
print(statistics.mean(x))
```

```
3.3333333333333335
```

13-troubleshooting

In [42]:
```python
print('we are learning python')
# print(we are learning python)## santax error
```

```
we are learning python
```

In [43]:
```python
print(24/0) # runtime error
```

```
---------------------------------------------------------------------------
ZeroDivisionError                         Traceback (most recent call last)
<ipython-input-43-b14612f58567> in <module>
----> 1 print(24/0) # runtime error

ZeroDivisionError: division by zero
```

In [44]:
```python
name ="ali" # smentic error
print("hellow name")
print("hellow",name) # with spacing
print("hellow"+name)# without spacing
```

```
hellow name
hellow ali
hellowali
```

In [ ]:

In [ ]: