

Python chilla with Amar Baba

Basic of Python

01-My frist program

```
In [1]: print(2+3)
        print("hello world")
        print("we are larning python with amar")
```

```
5
hello world
we are larning python with amar
```

02-operations

```
In [2]: print(2+3)
        print(3-5)
        print(3/4)
        print(3*2)
        print(3%6)
        print(3//4)
        print(4**3)
        print(3**2/3*3+6-6)
```

```
5
-2
0.75
6
3
0
64
9.0
```

03-String

```
In [4]: print("hello world")
        print("we are learning with amar")
        print('put a code in single quotes')
        print("put a double quotes")
        print('''put a code in tripple quotes''')
        print("what's up")
```

```
hello world
we are learning with amar
put a code in single quotes
put a double quotes
put a code in tripple quotes
what's up
```

04-Comments

```
In [5]: #press those to comment out (Ctrl+/)
print("how are you")
print("we are learning with aamar")#print a string
print(2*4)#print operations function with numbers
```

```
how are you
we are learning with aamar
8
```

05-Variables

```
In [6]: # #variables:objects contaning specific values
x = 5 #numeric or integer variable
print(x)

y="we are learning python with aamar"#string variable
print(y)

x=x+10 #or x=15
print(x)

# #types/class of variable
type(x)
print(type(x))#numeric class
type(y)
print(type(y))#string class

# #print_type_class

# #-Rule to assign a variable
# #-The varibale should contain latter, number or underscore
# #-Do not start with a number
# #-Spaces are not allowed
# #-Do not use keyword in functions (break,mean ,media,etc.)
# #-Short and discriptive
# #-case sensrivity (Lowercase,and upercase)lowercase should be used

fruit_basket1=8+3
fruit_basket="Mangos"
fruit_basket2="Bananas"
print(fruit_basket1)
print(fruit_basket,fruit_basket2)
print(type(fruit_basket))
```

```
5
we are learning python with aamar
15
<class 'int'>
<class 'str'>
11
Mangos Bananas
<class 'str'>
```

06-Input_variables

```
In [7]: fruit_basket="Mangos"
print(fruit_basket)

# #input Function
from unicodedata import name

fruit_basket=input("what is your name? ")
print(fruit_basket)
#-2nd stage input function
name=input('what is your name? ')
greetings="hello!"
print(greetings,name)

# #-3rd stage input function
name=input("what is your name? ")
print("hello!",name)

#-4th stage input function
name=input("what is your name? ")
age=input("how old are you ")
greetings="Hello!"
print(greetings,name, ", your are still young")
reply=input("")
print(reply)
```

```
Mangos
what is your name? usama
usama
what is your name? usama
hello! usama
what is your name? usama
hello! usama
what is your name? usama
how old are you 20
Hello! usama , your are still young
yes
yes
```

07-Conditional_Logic

```
In [8]: #-Logical operators are either "true or false" or " yes or no " or " 0 or 1"

#-Equal to ==
#-Not Equal to !=
#-less than <
#-greater then >
#-less then or equal to <=
#-greater then or equal to =

print(4==4)
```

```

print(4!=5)
print(4>5)
print(5<6)
print(5<=6)
print(7>=6)

#application of logical operator
ali_age=5
school_age_is=3
print(ali_age>=school_age_is)
#input Function and logical operator
school_age_is=5
ali_age=input('what is ali age? ')
ali_age=int(ali_age)
print(school_age_is<=ali_age)

```

```

True
True
False
True
True
True
True
what is ali age? 2
False

```

08-Type_Conversion

In [9]: `from tkinter import Y`

```

x=11                #integer
y=15.1              #float
z="hello world"     #string

x=x*y
#implecit type conversion
print (x,"type of x is",type(x))

#explicit type conversion

age=input("what is your age")
print(age,type(int(age)))

166.1 type of x is <class 'float'>
what is your age23
23 <class 'int'>

```

09-if_else_elif

In [10]: `#required_age_at_school`

```

usama_age=3
school_required_age=5
if usama_age==school_required_age:
    print("usama go to school")
else:
    print("Age is not complete for joining school")

```

```

usama_age=input("what is usama age? ")
school_required_age=5
usama_age=int(usama_age)
print(type(usama_age))
if usama_age == school_required_age:
    print("Usama has join the School")
elif usama_age>school_required_age:
    print("Usama should join higher secoundary School")
elif usama_age <= 2:
    print("Usama is still a baby")
else:
    print("Age is not complete for joining School")

```

```

Age is not complete for joining school
what is usama age? 3
<class 'int'>
Age is not complete for joining School

```

10- function

```

In [11]: #Defining a function
         #_1
         from cgitb import text
         from hashlib import new
         from tarfile import USTAR_FORMAT

         def print_umar():
             print("we are learning with aamar")
             print("we are learning with aamar")
         print_umar()
         #_2
         def print_umar():
             text="we are learning with aamar"
             print(text)
             print(text)
         print_umar()
         #_3
         def print_umar(text):
             print(text)
             print(text)
         print_umar("we are learning with ammar")

         # #defining a function with if,elif and else statment

         def school_calculator(age,text):
             if age==5:
                 print("Usama is join the School")
             elif age>5:
                 print("Usama is should go to higher secondary school")
             else:
                 print("Usama is still a baby")
         school_calculator(20, "Usama")

         # define a function of future

```

```
def future_age(age):
    new_age=age+20
    return new_age
    print("new age")

future_age_predication=future_age(18)
print(future_age_predication)
```

we are learning with aamar
 we are learning with aamar
 we are learning with aamar
 we are learning with aamar
 we are learning with ammar
 we are learning with ammar
 Usama is should go to higher secondary school
 38

11-Loops

In [12]: *# #while and For loops*

```
# #while loops

from re import X

x=0
while (x<=5):
    print(x)
    x=x+1

# # for loop

for x in range(4,11):
    print(x)

#array
days= ["Mon","tue","wed","thu","fri","sat","sun"]

for d in days:
    if (d=="fri"): break    #Loop stop
    print(d)
```

0
1
2
3
4
5
4
5
6
7
8
9
10
Mon
tue
wed
thu

12-Import Libraries

```
In [13]: #if you want to print the value of pi  
import math  
print("the value of pi is",math.pi)
```

```
import statistics
```

```
x=[100,200,350,500]
```

```
print(statistics.median(x))
```

```
the value of pi is 3.141592653589793  
275.0
```

13-Truble_Shooting

```
In [ ]: # print(we are learning puthon with aamar)#this is syntex error
```

```
#print(25/0)# this is runtime error
```