

python ka chilla with baba_ammam

how to use jupyter note book

Basics of python

1- My first program 2- My second program

Python ka chilla with baba ammar

How to use jupyter notebook

Basics of Python

1- My first program

```
In [ ]: # My first program in python
print(2+3)

print("Hi boy")
print("we are learning python")
```

5
Hi boy
we are learning python

In []:

In []:

2- My second program

```
In [ ]: print(2+1)
print(4-2)
print(4*2)
print(8/2)
print(9%2)
print(6//2)

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

3
2
8
4.0
1
3
8

PEMDAS Parenthesis Exponents Multiply Divide Addition Subtraction Left to Right sequence for M D & A S

3- Strings

```
In [ ]: print("Hello World")

print('Test for single quotes')
print("Test for double quotes")
print(''''Test for triple quotes''')

print("What's up?")
```

```
Hello World
Test for single quotes
Test for double quotes
Test for triple quotes
What's up?
```

4- Comments in Python

```
In [ ]: # The shortcut key is CTRL + /
```

5- Variables

```
In [ ]: # variables are objects containing specific values
x = 5
print(x)
y = "we are learning python with ammar" #string variable
print (y)
x=12
print(x)

type(x)
print(type(x))

# Rules to Assign variable

# 1- the variable should contain letters, numbers or underscores
# 2- Do not start with numbers
# 3- Spaces are not allowed
# 4- Do not use keywords use in functions
# 5- Variable should be short and descriptive
# 6- Case sensitive

fruit_basket= "Mangoes_ Basket"
fruit_basket= "Mangoes_ Basket"
# del fruit_basket

print(fruit_basket)
print(type(fruit_basket))
```

6-Input Variables

```
In [ ]: from turtle import fd

fruit_basket = "Mangoes"
print(fruit_basket)

# Input function simple
fruit_basket= input("What is your favourite fruit? ")
print(fruit_basket)

#Input function of 2nd stage

name= input ("Whats your name? ")
greetings= "Hello!"
print(greetings, name)
print("your favourite fruit is", fruit_basket)

# 3rd stage input function
name= input("What is your name? ")
age= input("How old are you?")
greetings= "Hello! "

print(greetings, name, "You are still young and beautiful")
```

```
Mangoes
What is your favourite fruit? banana
banana
Whats your name? Rumman
Hello! Rumman
your favourite fruit is banana
What is your name? Rumman
How old are you?26
Hello! Rumman You are still young and beautiful
```

7-Conditional Logics

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

# equal to          ==
# not equal         !=
# less than         <
# greater than      >
# less than and equal to  <=
# greater than equal to  >=

# is 4 equal to 4?
# print(4==4)
# print(4!=4)
# print(4>3)
# print(3>6)
# print(3>=6)
# print(5>=4)

#application of logical operators
# hammad_age=4
# age_at_school=5
# print(hammad_age==age_at_school)
age_at_school=5
hammad_age=input("How old is hammad? ") #input function
```

```
hammad_age=int(hammad_age)
print(type(hammad_age))
print(age_at_school==hammad_age) #logical_operator
# convert input
```

How old is hammad? 6
<class 'int'>
False

8-Conversion

```
In [ ]: from tkinter import Y

x = 10      #integer
y =10.2     #float
z="Hello"   #string
# Implicit type conversion
x=x+y
print(x, "type of x is", type(x))

#Explicit type conversion

age= input("Whats your age?")
age = int(age)
print(age, type(age))

#name
name = input("what is your name")
print(name, type(name))

20.2 type of x is <class 'float'>
Whats your age?26
26 <class 'int'>
what is your nameRumman
Rumman <class 'str'>
```

09-if_else_elif

```
In [ ]: hammad_age= 3
required_age_at_school=5

if (hammad_age==required_age_at_school):
    print("Congratulations! Hammad can go to school")
elif(hammad_age>required_age_at_school):
    print("Congratulations! Hammad can go to school")
elif(hammad_age<required_age_at_school):
    print("You should teach your child yourself")
else:
    print("Sorry! Hammad can not go to school")
```

You should teach your child yourself

```
In [ ]: **10-Functions**
```

```
In [ ]: # def printcodanics():
#     print("We are learning with ammar")
#     print("We are learning with ammar")
#     print("We are learning with ammar")
#     print("We are learning with ammar")
```

```
# print("We are Learning with ammar")

# # printcodanics();

# def printcodanics():
#     text="we are Learning with Aammr"
#     print(text)
#     print(text)

# def printcodanics(text):
#     print(text)
#     print(text)
#     print(text)

# printcodanics("we are Learning code with ammar")

def school_calculator(age):
    if(age==5):
        print("Hammad can join school")
    elif(age>5):
        print("hammad should go to higher school")
    else:
        print("Hammad is still a baby")
school_calculator(6)

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

Age_prediction= future_age(26)
print(Age_prediction)
```

hammad should go to higher school
46

11- Loops

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

for x in range(4,12):
    print(x)

days = ["Mon", "Tue", "Wed", "Thu", "Fri", "Sat", "Sun"]

for d in days:
    #if (d=="Thu"):break # Loop stops
    if (d=="Fri"):continue # Loop stops

    print(d)
```

1
2
3
4
5
4
5
6
7
8
9
10
11
Mon
Tue
Wed
Thu
Sat
Sun

12-Libraries

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

import statistics
x= [150, 250,350, 450]

print(statistics.mean(x))
```

The vaue of pi is 3.141592653589793
300

13- Troubleshooting

```
In [ ]: # print(we are Learning python) # Syntax error

# print(25/0)    # runtime error

# name = "Rumman"
# print("Hello name" ) # simantic error
```

My_firstline_of_code

```
print(7+3) print("Hi boy") print("we are learning python")
```