Python ka Chilla\_With Baba\_Ammar How to use jupyter Note Book Basics of Python **01.My first Programme** In [3]: print(2+3) print("Hello World") print("We are learning Python with Ammar Bhai") Hello World We are learning Python with Ammar Bhai 02.operators print(2+2) print(3-2) print(6/3)print(2\*4) print(17%2) print(6//2) print(3\*\*3) print(3\*\*2/2\*3/3+6-4) 1 2.0 8 1 3 27 6.5 PEMDAS parenthesis, Exxponents, Multiply, Divide, Additioin, Substraction left to Right sequence for MD AS:((23)3\*2/23/3+6-4)\* Topic:03.strings In [10]: print("Hello World") print("We are learning Python with Ammar Bhai") print('test for singla quotes') print("test for double quotes") print('''test for tripple quotes''') print("what's up") print(" what's up ?") Hello World We are learning Python with Ammar Bhai test for singla quotes test for double quotes test for tripple quotes what's up what's up ? 04.comments In [7]: print("Hello World") print("We are learning Python with Ammar Bhai") print(2+7) Hello World We are learning Python with Ammar Bhai press these to comment out (ctrl + /) print a string. comments up to down print operationrs function with numbers 05.variables In [10]: x= 4 print(x) y="we are learning Python With Ammar Bhai" print(z) type(x) print(type(x)) print(type(y)) print(type(z)) fruit\_basket="Mangoes" print(fruit\_basket) fruit\_basket="oranges" print(fruit\_basket) fruit\_basket=8 print(fruit\_basket) print(type(fruit\_basket)) print(fruit\_basket) fruit\_basket=16 print(fruit\_basket) print(type(fruit\_basket)) print(fruit\_basket) fruit\_basket="Mangoes" print(fruit\_basket) print(type(fruit\_basket)) print(fruit\_basket) fruit\_basket="Mangoes" print(fruit\_basket) del fruit\_basket print(type(fruit\_basket)) print(fruit\_basket) 4 15 <class 'int'> <class 'str'> <class 'int'> Mangoes oranges <class 'int'> 16 <class 'int'> Mangoes <class 'str'> Mangoes Mangoes Traceback (most recent call last) Input In [10], in <cell line: 47>() 45 print(fruit\_basket) 46 **del** fruit\_basket ---> **47** print(type(fruit\_basket)) 48 print(fruit\_basket) NameError: name 'fruit\_basket' is not defined \*print\_type\_class Rules to assign a vaiable 1. the variable should contain letters, numberes 2. Do not start with number 3. Space are not allowed 4. Do not use keywords in function(false, class, finally, is, return, none, a) continue, for, lambda, try, true, def, from nonlocal, while, and del, global, B) not, with, as, elif, if, or yeld, assert, else, import, pass, break, except, in raise,) 5. short and descriptive 6. case senstivity,(lowercase,uppercase letters, lower case letter should be used)m\* \*\*06.input\_variable fruit\_basket="Mangoes" In [11]: print(fruit\_basket) fruit\_basket=input("what is your favourit fruit?") print(fruit\_basket) fruit\_basket=input("what is your favourit fruit? ") print(fruit\_basket) name=input("what is your name? ") greetings="Hello!" name=input("what is your name? ") print("Hello!", name) name=input("what is your name? ") age=("How old are you? ") greetings="Hello!" print(greetings, name, "You are still young") print(greetings, name, ", You are still young") Mangoes what is your favourit fruit? Mangoes Mangoes what is your favourit fruit? apple what is your name? Muhammad Shahzad Chauhan369 what is your name? M\_S\_Chauhan369 Hello! M\_S\_Chauhan369 what is your name? M\_S\_Chauhan369 Hello! M\_S\_Chauhan369 You are still young Hello! M\_S\_Chauhan369 , You are still young input function input function with space input frunction of 2nd stage another way of stage 2 input function 3rd stage input function input\_Ammar\_You are still sweet Young boy 07.conditional\_logics In [13]: hammad\_age=4 age\_at\_school=5 print(hammad\_age==age\_at\_school) age\_at\_school=5 hammad\_age=input("How old is hammad? ") print(hammad\_age==age\_at\_school) age\_at\_school=5 hammad\_age=input("How old is hammad? ") print(type(hammad\_age)) print(hammad\_age==age\_at\_school) age\_at\_school=5 hammad\_age=input("How old is hammad? ") hammad\_age=int(hammad\_age) print(type(hammad\_age)) print(hammad\_age==age\_at\_school) False How old is hammad? 5 False How old is hammad? 5 <class 'str'> How old is hammad? 5 <class 'int'> True print(4==4) In [11]: print(4!=4) print(4>3) print(3>6) print(3<=5) print(5>=4) True False True False True True \*logical poerators are either "true or false" or "yes or no" or "0 or 1" equal to == not equal to != less than < greater than > less than and equal to <= greater than and equal to >= is 4 equal to 4? application of logical operators input funcion and logical poerator input function logical operator input function logical operator input function int means integer logical operator convert input\* 08.type\_conversion In [8]: x=33 z="Hello" print(x, "Type of x is:", type(x)) age=input("What is your age? ") print(type(age)) age=input("What is your age? ") age=int(age) print(type(age)) age=input("What is your age? ") print(age, type(int(age))) age=input("What is your age? ") print(age, type(float(int(age)))) name=input("What is your name? ") print(name, type(int(name))) 37.3 Type of x is: <class 'float'> What is your age? 18 <class 'str'> What is your age? 30 <class 'int'> What is your age? 30.5 ValueError Traceback (most recent call last) Input In [8], in <cell line: 16>() 13 print(type(age)) 15 age=input("What is your age? ") ---> **16** print(age, type(int(age))) 18 age=input("What is your age? ") 19 print(age, type(float(int(age)))) ValueError: invalid literal for int() with base 10: '30.5' \*imlicit type conversion explicit type conversion age=int(age) age=int(age) from ast import Name from re import X type\_conversion\* 09.if\_elif\_else hammad\_age= 4 In [16]: requird\_age\_at\_school=5 # question: can hammad go to school? if hammad\_age==requird\_age\_at\_school: print("Hammad can join the school") hammad\_age= 5 requird\_age\_at\_school=5 # question: can hammad go to school? if hammad\_age==requird\_age\_at\_school: print("Hammad can join the school") else: print("Hammad can not go to school") hammad\_age= 10 requird\_age\_at\_school=5 # question: can hammad go to school? if hammad\_age==requird\_age\_at\_school: print("Congratulations! Hammad can join the school") elif hammad\_age> requird\_age\_at\_school: print("Hammad should join higher secondary school") elif hammad\_age==2: print("you should take care of Hammad, he is still baby!") else: print("Hammad can not go to school") hammad\_age= 1 requird\_age\_at\_school=5 # question: can hammad go to school? if hammad\_age==requird\_age\_at\_school: print("Congratulations! Hammad can join the school") elif hammad\_age> requird\_age\_at\_school: print("Hammad should join higher secondary school") elif hammad\_age<=2:</pre> print("you should take care of Hammad, he is still baby!") print("Hammad can not go to school") Hammad can join the school Hammad should join higher secondary school you should take care of Hammad, he is still baby! if, elif, else statement clear 10.functions # 1 In [17]: def print\_codanics(): print("We are learning With Ammar Bhai") print("We are learning With Ammar Bhai") print("We are learning With Ammar Bhai") print\_codanics() # 2 def print\_codanics(): text = "We are learning With Ammar Bhai" print(text) print(text) print(text) print\_codanics() def print\_codanics(): text = "We are learning With Ammar Bhai in Codanics Youtube Channel" print(text) print(text) print(text) print\_codanics() # 3 def print\_codanics(text): print(text) print(text) print(text) print\_codanics() def print\_codanics(text): print(text) print(text) print(text) print\_codanics("We are learning Python With Ammar Bhai in Codanics Youtube Channel") def school\_calculator(age, test): **if** age**==**5: print("Hammad can join the school") elif age>5: print("Hammad should go to higher school") print("Hammad is still a baby") school\_calculator(2, "Hammad") def school\_calculator(age): **if** age**==**5: print("Hammad can join the school") elif age>5: print("Hammad should go to higher school") print("Hammad is still a baby") school\_calculator(2) def future\_age(age): new\_age=age+20 return new\_age print(new\_age) future\_predicted\_age=future\_age(18) print(future\_predicted\_age) We are learning With Ammar Bhai in Codanics Youtube Channel We are learning With Ammar Bhai in Codanics Youtube Channel We are learning With Ammar Bhai in Codanics Youtube Channel Traceback (most recent call last) Input In [17], in <cell line: 32>() 29 print(text) 30 print(text) ---> 32 print\_codanics() 34 def print\_codanics(text): print(text) TypeError: print\_codanics() missing 1 required positional argument: 'text' print("We are learning With Ammar Bhai") print("We are learning With Ammar Bhai") print("We are learning With Ammar Bhai") defining a function with if, elif and else statements defining a function of future: i understand functions very well 11.Loops # while and for loops # while loops X=0 **while** (x<5): print(x) x=x+1# for loop for x in range(5,10): print(x) for x in range(4,11): print(x) #ARRAY set days="Mon", "Tue", "wed", "thu", "fri", "Sat", "Sun" for d in days: print(d) for d in days: if (d=="fri"):break #loop stops print(d) for d in days: if (d=="fri"): continue #skips d print(d) 0 1 2 8 9 4 Mon Tue wed thu fri Sat Sun Mon Tue wed thu Mon Tue wed thu Sat Sun 5 Mon Tue wed thu fri Sat Sun Mon Tue wed thu Mon Tue wed thu Sat Sun 6 Mon Tue wed thu fri Sat Sun Mon Tue wed thu Mon Tue wed thu Sat Sun 7 Mon Tue wed thu fri Sat Sun Mon Tue wed thu Mon Tue wed thu Sat Sun 8 Mon Tue wed thu fri Sat Sun Mon Tue wed thu Mon Tue wed thu Sat Sun Mon Tue wed thu fri Sat Sun Mon Tue wed thu Mon Tue wed thu Sat Sun 10 Mon Tue wed thu fri Sat Sun Mon Tue wed thu Mon Tue wed thu Sat Sun 1.while and for loops 2.while loops 3.for loop 4.ARRAY set 5.loop stops 6.skips d 12.import\_libraries print("The value of pi is ",math.pi) import statistics x=[150, 250, 350, 540] print(statistics.mean(x)) y=[454+23+45+56+98+9+90+87+65]print(statistics.mode(y)) z=[388+23+123+321+434+89] print(statistics.median(z)) The value of pi is 3.141592653589793 322.5 927 1378 1.if you want to print the value of pi 2.lot of libraries, we can use to slove the prombles. 3.numpy, pandas 13.trouble\_shooting In [1]: print("Wer are learning With Ammar Bhai") print(24/0) name="Ammar Bhai" print("Hello name") print("Hello ", name) print("Hello"+ name) Wer are learning With Ammar Bhai -----ZeroDivisionError Traceback (most recent call last) Input In [1], in <cell line: 2>() 1 print("Wer are learning With Ammar Bhai") ---> 2 print(24/0)4 name="<mark>Amma</mark>r Bhai" 5 print("Hello name") ZeroDivisionError: division by zero 1.print(we are learning With Ammar Bhai) # this error is called syntaxError 2.it is orginal Python Coding language 3.We can say that is a Runtime Error 4.It is a difficult Error to remove by Coder, 5.due to lot of data in Python. It is Error made by Coder. #symantic Error 6.In this stage we use "Hello (space)",(comma) and last we write name 7.the Coder input +sign it will show without space and print the code easy 8.trouble shooting is easy now. I love You Ammar Bhai By Muhammad Shahzad Chauhan 369 Email: s.chuhan2011@gamil.com Cell Number: 03154534792