LOOPS AND CONDITIONALS: FIZZBUZZ 01

Hey hey amith come we will play a game know i will teach everything come ok ok, shubudha and suma come let's play a game come come cheer up come. Ok see the game is called as fiizzbuzz ok, we are six in numbers so the game goes like this, he will start from one and then two and for all multiples of three will tell fizz and then multiples of five will tell buzz and multiples of three and five will be fizzbuzz! Yes. So you got it. Play? Ok ok. Should i start? Yeah. One two fizz four buzz fizz seven eight fizz buzz eleven fizz thirteen fourteen fizzbuzz. Hey this is so easy know so is it? Ok then we will check from one not one, you start from one not one. One zero one fizz one not three, one not four, buzz, one not six, one not seven, fizz, hey hey!! That is fizzbuzz yesss! Actually now it's getting complicated. Correct! Yeah so complicated, hey this is a nice game i think i should write a piece of code for this, it will be a kick back for me. Why do you think of coding all the time? Go get a life dude, exactly! Hey this is what i enjoy, will definitely write a code for it. Hello every one today i am here to code for fizzbuzz we saw you guys saw me playing that game and i told that day that i am going to code for it so let's see how we can code write a programme for fizzbuzz. So first i will start my spyder, so assuming that you have all installed anaconda on your system, i am using my Mac you need to start your spyder so go to your terminal and type spyder in even though it is same in windows you can go to start and write spyder in your application and you will get a spyder idle and just click on it and the spyder will open so let's see, so you need to install anaconda first, with anaconda you get spyder idle, without spyder also you can work on your simple terminal or command prompt but we strongly recommend you to use spyder because it is very easy for you guys. So i am already created a file name here fizzbuzz here, if you will just start a spyder you will get a new file here you can save it by name you want so i saved it as fizzbuzz now here i will write all my programme for fizzbuzz. Okay guys let's do this. So this is the place where i write my programme, this is the place where all the outputs and console related things will come so i hope you guys know the interface well anyways you can always Google up and look what are the things here so this is the new Ipython console which starts with the spyder in the Ipython means instructive python so you can visualise things here will see in some other examples in how we can use the Ipython so here the grid thick python is that you can even do the computation on fly, fly means in console you can write things and it will give the output so for example if i write two plus three it will just show me five so it's better you like that if you does the computation on flier that then in c c++ where you have to create an dot exe file and you can run it on your computer which will show you the output here interactive Ipython console are works like this do the computation on fly. So what the fizzbuzz let me explain the fizzbuzz game again so what we did there suppose a person is saying the number and that number is multiple of three then that person has to say fizz rather than saying that number at loud so suppose if i am saying one two and three comes then i have to say fizz or any multiple of three comes like if six comes then also i have to say fizz or nine comes then also i have to say fizz and if the multiple of five comes then i have to say buzz if ten comes i have to say buzz and if multiples of three and five comes for example the number which is divisible by three and five i have to say fizzbuzz for

example if fifteen comes i have to say fizzbuzz rather than just saying fifteen and a person if says rather than saying all these three, if he says the number then he is out of the game so what we are going to programme, if a number comes which is the multiple of three i have to say fizz if it is a multiple of five i have to say buzz if it is a multiple of both of three and five i have to say fizzbuzz for that i need a loop so what i will do i will just print a number from one to fifty and check whether my loops work and then i will just divide that number with all my taking care of all the condition i will write those condition and i will complete my programme for that first i need a loop. Loop the syntax of i assume you know the syntax of loop is very simple and straight for i in range, range is the pre defined function in python where it takes the number and prints the range from zero to that number, even negative values it can take but i am taking positive value so suppose if i type in a range fifty then just print the number, it will gives the value from zero to forty nine so it starts from zero ok zero to forty nine we will get but what i want is print numbers from one to fifty for that i will write for i in range one to fifty one because it is giving always the number minus one values i will write print i that's it we will get numbers from one to fifty ok great now i know how to write a loop so i will just write that loop here i will write for i in range one to fifty one ok now i have a number at every iteration of this loop i will get a number from one to fifty one suppose if i get a number which is the multiple of three i have to print fizz rather than that number once i will write there print if condition, for that i need if condition i have to check whether the number is divisible by three or not if it is divisible by three then i have to print fizz i will write if i mod three is equal to zero which means i is divisible by three print fizz that's it and if it is divisible by five for example the number ten it is divisible by five then i have to print buzz but that i will write if else i mean if it is not divisible by three but it is divisible by five else if i mod five is equal to zero which means if it is not divisible by three but it is divisible by five print buzz and if it is divisible by both three and five then i have to write fizzbuzz for that i have to write a condition if i mod three is equal to zero and because i need both the condition that is i mod five is equal to zero so if i mod three is equal to zero and i mod five is equal to zero it means then the number is divisible by both three and five and then i have to print, print fizzbuzz that's it we are done so let me click the console here i will just run this programme you can run it from here you can see that hi am getting fizz buzz fizz buzz fizz buzz fizz fizz something like that i don't know which number is giving me fizz which number is giving me buzz and which is giving me fizzbuzz for that i need to print that number also so i will write the number i will associate the number with their corresponding fizz then in order to print two string plus operation for example if i want to concatenate see here amit sudarshan with plus operator i can concatenate these two string it will show me amitsudarshan hence i want to print i associated with that number means it will show if three is coming it will show three is equal to fizz, it will show like this three is equal to fizz so it will show like this three is equal to fizz for that what i will do in the print statement i will first convert the number, number is integer so i have to convert that number in to a string ok for that i will write str of i for convert my i whatever i am getting here fifty one into a string with plus operator i will concatenating this string with the fizz, if it is fizz right? i will copy this and if it is none of this neither fizz nor buzz nor fizzbuzz then i have to write else just print you can just print i also head start i will show you what string does for example i file a number x is equal to one two three four if i write str of x it will give me a string and it can always be you can save this

also and you know this sting is character only so if you write a two get the value at two array is always starts with zero it should show me two ok let's get back to the programme everything is complete now i will just run it and let's see what happens great it's running everything is fine for one i don't have anything for two nothing three should print fizz ok i am getting fizz i will give a space here should look nice, better whatever you programme it should look nice ok we will run it again yeah perfect for one i am getting nothing, for two nothing, three is fizz, four is nothing, five is buzz, six is fizz, because it is a multiple of three nine is multiple of three fizz, ten is multiple of five buzz twelve is multiple of three thirteen fourteen nothing, fifteen is fizz ok see this fifteen i am getting fizz but i suppose to get fizzbuzz because fifteen is multiple of both three and five so here is the problem this is the very common problem we get according to me and according to you guys also i suppose that this programme is very the logic is very perfect i don't think there is any flaws in the logic but still i am getting fizz here rather than fizzbuzz i am not getting fizzbuzz so what's the problem? So can you guys guess? What did i do wrong, in next video i will explain what is the problem and we will see how to correct it and how to write a right programme for this fizzbuzz? You can post all your problems regarding this video in discussion form you can also discuss there so i encourage you guys to discuss this problem on discussion form will see this in next video.