

## THEORY OF EVOLUTION 02

Hey everyone as you all say i just had a conversation with my friend avni and i am really fascinated by this idea of evolution. Evolution is actually the change in inheritable characteristics over successive generation and how this change happens? This change happens through genes, genes have dna and dna have coding information in the form of beds in the form of zeros and ones and if this information changes if zero becomes one or one become zero it actually needs to evolution so i will like to code this particular fact but before jumping to the programming screen cast of evolution let me give you some prerequisites, first of all we will be looking at the concept of file handling in python how can you read and write files in python? We will be looking at txt file the files with dot text extensions so let us start with that. So here i have a file named file one dot txt you can create your own file. So here is my file i have written hello, how are you in it as you can see hello how are you has been written here i need to read this file and write something in it so how can you do that? How can you realise through python? So first of all you have to open this file so let us do that, we will just write with open your particular file name, my file name is file one dot txt and a signer name to it for example i will add a sign my file and i have to read that file so i will use a function read here i will just print what has been written in the file so i will just write file one dot no you have named it my file dot read let us do that see, it has read the file. We wrote hello how are you and it is the reading the file as hello how are you, so it is working for example now i write, we want to write i am fine in the file so how can you write? I just use the write function here for reading the read function and then the same way i will use the write function here my file dot write for example i want to write i am fine, ok after that please not the fact that you have to close the file so i will just close the file my file dot close, close function is used to close the function here so let us run it there is some error here that is unsupported operation that is not writeable yes this file is not writeable so i will just write in w mode there are different modes in which you can open the files, r is used for reading mode and w is used for writing mode. So i need to write the file so i just use w mode so let us run it again now the exception is now the error is not readable so we need to read and write the file simultaneously so there is another mode that is r plus mode there are various modes in which you can open the file, i will use r plus mode r plus mode opens the file read as well as write please note this fact so i will run it again. So here we have i am fine now if you read the file you have i am fine in this so let me check that, our file was file one dot txt let me open it again. So since we executed it twice we have i am fine i am fine again in this so let me show you by zooming it we have i am fine i am fine twice since we ran it twice, so this is how we can read and write files here so the error we encountered here was that we have to open the file in particular modes so if we want to open the file in reading mode then you can only read. If you can want to open the file in w mode then you can only write and if it is R plus then you can read as well as write. So there are many such modes in which you can open the file let us explore that. For example here we have different modes so here we have different modes we have R mode in which read mode is used, W in which write mode is used to edit and write new information to the file and we also have A mode that is appending mode, you observe

this fact when i wrote i am fine in the file hello how are you, it got erased off so if we i opened the file in A mode that is in append mode then hello how are you would stay in the file and i am fine would be appended in the file and next is R plus that we use just use it is use to read and write the files and yes special read and write mode which is used to handle both the actions when working with the file. So there are four modes in which you can open the file first is R that is read mode next is W for write mode third is appending mode in which you can append the data in which you can append means add the data to the file ok by not erasing the precious data and the fourth one is the R plus mode that is the special mode if you want to read and write the file simultaneously. In this way you can do the file handling in python,