

FUN WITH CALENDAR 04

Alright guys in the previous video we had seen how we can fetch the current system time may be will have a very quick recap of that too because we will be seeing an extension of it basically from so let me give a recap from date time that is a super set import the sub set date time given the name is big let me abbreviate it as dt and to get the time what did i do i said print dt dot now what is the name now is displayed, fourth October two thousand eighteen sixteen twenty two four twenty two seventeen minutes these many Millie seconds this is the time. Alright so if i want to know the time in other locations say Singapore, America or whatever i want to know the time so what should i do? So they follow something called a time zone so as you know the standard time that is calculated by the green witch meridian in your school geography you would have studied using the green witch meridian that zero degree longitude is taken as the standard and time is calculated and our Indian time is gmt that is gmt green witch mean time that is the standard timer standard time that is considered and from that gmt our Indian time is heard by five hours and thirty minutes gmt plus five thirty is our time zone like that there are different time zones so i want to know what is the time zone of in that time zone of Singapore. So what should i do? Here i need to work with time zones right so i need to import something called a time zone i need to use something called a time zone for that i need to import the package pytz import py py for python and tz for time zone so i had imported it and now i need to create the time zone object this is how python works, you can know more of what is an object and of all if you had studied course called object oriented programming you would have an idea if not also you will be learning it that's very simple it's not a rocket science you can quickly learn it just know that something like time zone special thing something if you want to work with time zone you need to create some special object this object you are going to create it now. So how would you create it? Simple pytz dot time zone what is the time zone you want to know that you have to give it as an argument here, you have to give it as argument i said Singapore so let me say Singapore. Singapore is the this thing i want to know so i have created a time zone object that is i want to know the time in this particular time zone of Singapore whatever is the time zone followed that is time is followed here i want to know this particular time so i have created an object and now simple just i have been printing right printing the time right with this i need to pass this object time zone so if i pass this object time as per Singapore it is displayed it is eighteen it is evening six o clock fifty five minutes thirteen seconds these many Millie seconds so this is plus zero eight is nothing but gmt plus eight hours, hours is Indian time is gmt plus five thirty right so two and half hours Singapore is ahead of India so gmt plus eight hours so this is how the time is displayed so you can give up specific time zone and know it and so how would i know what i just know the country i don't know the time zone what if that is the case, you can always look it up like they have name the time zones differently our Indian time zones is named as Asia Kolkata so they had given some time zones they had just given the name for the country for some time zones they had given some prominent cities in that country as the identifier name something like that this is the identifier Singapore is not the this is not the time in Singapore in and around Singapore whatever is the countries that follow this time zone this time there so this is the identifier for the time zone region Singapore is an identifier for some regions they have given the country name for some they have given the

prominent city name in the country and for some they have separated with continent followed by the name of the city or country or whatever that's how they had given they are different time zones they are defined in python so you have to give that specific value here what if i don't know the time zones that are present in python. How will i get the list of all time zones present in python simple even that is defined already, simple you just need to type `pytz dot all underscore time zone time zones` just type it see you got a list you got a list of all time zones see oh my god there are so many i am not able to understand where it starts there are so many so ok let me do a thing let me see how many are present there is a list right so we want to know how many are present there so i will use the functionality `length` so let me use it let me say `length` of this list five ninety one five hundred times of five hundred plus time zones are supported here in python so may be there may be some variations if you have because in my Linux system i remember getting some five seventy range answer in windows version there is five ninety one may be there is an update software or whatever be that when you are trying there may be a variation if there is an update you will see an different number but currently these many time zones are being supported in python so these are the different time zones so here you can look it up as to what is the time zone that you see pacific, Portugal, Poland, Singapore, turkey you have different things so you can look it up as through what this is, what is the time zone that you want to know so green which is the standard time so Greenwich is our midpoint and all these are behind gmt and all these are ahead of gmt so will get something like that oh no there are arranged in ascending orders i am sorry for this i am sorry for the info if that is the case then India should have come there given that i didn't spot India realise that they have arranged that in alphabetical order so the alphabetical order they have arranged the names see Asia Kolkata is our Indian time zone you could see it here Asia Kolkata this is our Indian time zone, Asia kualalumpur is for Malaysia Kuwait you have a lot Karachi Pakistan, Kabul, Jerusalem you have a lot you can see through the list there are some five hundred plus time zones so this is how you will be working with the time zone basically you will create something called as time zone object and pass that object to your `day time dot now` functionality you will be passing it, to get the time as per that time zone so in that case what was the output let us see. Just revisit it once we had created an object and now we want to print it, what is an output? Its gives the date time and it says what is the difference from gmt plus zero right means its eight hours ahead of gmt so that's what is known from here that's what is the output that is earthling just that you need to create an time zone object and just pass it through the `now` functionality this is how you deal with different time zones. Alright guys the question that i have addressed initially the suspense and is given a date how would you find which day it falls on that still pending right we will see that in the next part of the video.