PERMUTATIONS-JUMBLED WORDS 03

Alright in the previous video you would have seen the outline of our play method so what is the game so we have seen the outline in the previous video may be we will give you a very quick summary we have two players each have been given zero pints initially and there is a variable turn to alternate their turns the computer would randomly pick the list a word from list of words it has jumbled it and then post the question based on whose turn it is player is supposed to guess the word the computer has in its mind he has to give his answer if that is exactly matching with what i computer has thought his point will be increased by one else he would be hide of the correct answer there is no change in his points and the next thing is ask the player wants to continue the game or not even if one player says i want to quit the game the game comes to an end because this is a two player game so the game comes to an end so once the player says i want to quit you need to update them of status till now and thank them for their participation and then you quit the game this is what is the outline you have seen till now. I said there is some missing gaps in the precious video i hope you would have sensed the gap let us try fixing it if you would see here the turn value is initialise to zero then if it is even it is player one's turn odd is player two's turn but have i updated the value of turn i haven't so that should be done close the missing gap here observe the indentation it has to be exactly indented with this if turn mod two is equals to zero that is one turn is them you have to increment the value of turn you have to increase the turn is equal to turn plus one so you have incremented please observe the indentation this is in column nine as well as this is in column nine fine so indentation is fine now play method is over so i have what did does is as i had given the outline everything is perfect and while the players turn is over the value of turn is incremented by one so that the next player can take his turn if you would try running it and turn is equal to zero it is the player one turn to play the game then turn values is increased so now the new turn value is one so this is the turn of player two at two against it goes to player one at three it goes to player two so at every value of turn which is an even number player one gets a chance to play and that odd values player two get chance to play this is how the game goes but the programme is not yet complete still he first thing is here we have send choose the word so the computer has to choose the word from the list of words it has so we have define what exactly the computer has to do so will do that here let me say define choose this is something we want the computer to do basically it will have some lists of words so now let me start off with some random words some random English words let me say rainbow computer science, computer science basically then programming this may be some word then mathematics let us move away slightly from academics player this is a word condition this could be a word reverse some word and one two three four five six seven eight so may be let me have two more words let us make it a list of ten words you may have any number of words that's never a problem you can increase it to hundred words thousand words you can have if you have lot of words during the continuous playing of the game it will be fun because there is a lot for the computer there is a lot of challenge for the computer to choose a word then pick any word you can get any word it will be fun so let me say water this is a water and then we would say boat let me say boat these are the words i have just some

random words i have given these are the list of words so from this list of words it has to randomly choose a word so for randomly choosing a built in library or random let me import it import random i have imported random library now i can what are all the functionality we find in the library so i would say random.choice i say randomly you need to choose from this list. So the default functionality for it is random.choice so in that random library there is a function for choice which will pick some element from your list so words is a list of our words so you have to pick something from list let me say pick equals random.choice this is a pre defined function and then the choice from the list of the words so from this list of words you pick the random word that is what just line means so after the word is picked just return this pick so now if you would see choose you say choose the control would come here it sees the list of words random.choice of words it sees this command so picks random words from this list and returns that value that returned value is taken as the picked word that is assigned a picked word so this is how the picked word things works now so we have faced this and then something which is not defined to the computer is jumbled let us do that now ok i have to define jumbled, jumble or a given word let me say, you have some word is given to you, you have to jumble that word that is nothing but the you are shuffling the word or you are rearranging the letters that's what you are doing. So for this as well you have something in random library you have some functionality it is called random.sample so you choose some words from this word you choose some letters from this word how many letters you have to post? May be actually i need all these letters so length of this particular word so what do i do this? I need to choose some number of letters from this word. How many numbers of letters? Basically all the letters i need to choose in some random order, i need to choose all the letters in some random orders for example let us take one word water, w a t e r there are five letters and five positions blank positions for our shuffled word i need to choose some letter from these five letters so from the five letter word consider all the five letters but the thing is you pick any one letter in a random order so may be i may pick tea, so tea is assigned in the first position, in for second position from the remaining i will pick one letter may be or so on this is how random word would be generated and this would be written as a list but what we need it as, we need it as a word so list is nothing but it would written as for example water let me say t r a w e this is the way it has picked the letters t r a w e will be the five elements in your list. But we want to merge those five elements, those five characters and make it as a single word so we are basically what we want is we need to join those things so for doing this there is a functionality called join so may be i would say join these things and for this join functionality we will generally give a separator that is in case you have a space you terminate your join there something like that may be if i would have some words where there are some spaces you terminate there, terminate at a place where you need basically if you would have learnt about string tokenizer this sounds as an complicated terminology that's very simple nothing but if you are i will just give a simple example there is some sentence that has been given to you, you need to count how many words are there in the sentence how would you so that? Count the number of spaces, the space acts as a separator between the words, so counting the number of spaces will give you a hint on how many words are there in the sentence so something like that so space acts as a separator so some separator has to be given based on which joining as to occur that is when as soon as you see the separator you perform this operation, perform the join operation, here i don't want to see any specific separator may

be space or a comma or a pull stop on seeing that only i want to perform this operation i don't want to something like that so let me just give the blank character this blank character.join that is don't see anything just keep joining the letters so t r a v a w e is the order i just randomly said so just keep joining them so just take t again just keep joining r take the next letter a join take the next letter w join take the next letter e join and this is how this particular functionality works. So this is basically separator, in case if i give some other separator what could happen is only one seeing that particular separation that separator this particular operation would be static i don't want that, i want that to be happening irrespective of whatever be the character so i just give a blank character this is a syntax that has been define so we are following it so let me say this is my jumbled word so after every individual character as been joined i get back to the word let me call that word has the jumbled word alright so once jumbled word is time you return this jumbled word, so this jumbled word is nothing but your question, so when you say question jumble of pick word the word is taken the letter of the word are shuffled that is the letters of the word are separated and they are randomly picked and you could get a list, you join the element of the list to get back a single word and you return that single word this is how this functionality works. And something else have we defined everything, just check once, we are getting the name points and turn choose has been just now defined then jumbled we just now have defined and now if we have something here we don't have to defined yeah thank yeah thank here is needs to be defined, fine so let's do that as well let's do that. Define thank, i have passed player one name player two name player one's points and player two's point i have passed these four values so what should i do? I have to print player one name i have to print his name and say your score is, player ones score i have to display and will have to do the same thing for player two as well let me copy paste this sorry let me copy let me copy and paste it i just need to do some modification so that this is player two's name and player two's score has to be and you have to thank them for their participation till now, may be i would say thanks for playing ok then i will have to print let me just say have a nice day this is purely your wish whatever you need to display is nearly your wish i will just print have a nice day. Sorry i need to give a bracket. Everything looks good let summarise we have define the play functionality we input the names of two players initially have their points at zero there is a variable turn to track of whose turn it is and the turn is alternative that is taken care by this mod two operator the task of creating the question is given to the computer, the computer will choose from its list of words, jumbled the letters of the word then display the question so based on the question and the turn the player will be given a chance to guess what the actual word is. So the guess will be taken and it will be compare whether the answer he has given and the actual word is the same, in case if it is the same his points will be increased by one and it is updated here. He is updated of his new score here, and then in case if his answer is wrong you just intimate the correct answer and don't update the score in here and you will be giving him the chance whether he wants to continue the game or he wants to quit. This is the two player game so if one person wants to quit the game comes to an end in case if they choose to quit you have to greet them thank them show them the summary of the game till now and then you quit the game, each and every functionality for that choosing random word that random library we had used so from the list of words randomly you pick a word and return it so this is what the choose functionality does and jumbling is nothing but, you randomly select the letter from the

word you keep it in some order and then you list the merge of those letters in different order what you have, what you have at time you merge you join the letters that is what you are doing here and you return the jumbled words and in thanking this is purely your creativity and this you are updating him of the status till now you are giving the summary of the game he has played till now, so you are giving the summary and you greet him with some nice lines basically this is what you are doing and see there is something that we missed here it's your score you need to display the players true score stat playing this game. Let me run, play this alright, player one let me enter your name let me say abc player two xyz some where it is coding ok this is wrong let me continue this is computer ok score is one, let me continue this is science computer science ok so as you could see the game is very interesting you can go on and on the thing that makes you difficult is when the number of letters increase as you could see here this was difficult for me to guess because there were so many letters here and as the number of letters increase the complexity so you try playing by long words in English you try doing it and there may be some variations in the game as well you can limit the number of guesses here i am just telling i am giving one chance if it is correct i will increase the point else i will say you are wrong may be you can have a variant in which you would give the player more chances to play the game he can take some three guesses something like that the creativity part is all in your hands so creativity sky is the limit please do try different variants and do discuss in the discussion form of how you have implemented those variants thanks for watching this video have a nice day.