PERMUTATIONS-JUMBLED WORDS 02

A person has a word on his mind he shuffles it and asks the other person to guess what that word would be. This is the game, sounds interesting? I said always this being the joy of computing course let us play this the fun way using our programming skills. Let's get started.

Before starting up with the programming let me just give you the summary of what the game is all about, this is nothing but there are two players in the game, player one and player two say initially we will starts up with player one's turn so player two will have some wording in her mind what the person does is he would re arrange the letters of the words, basically he would shuffle the words and write those letters in some random order, in some shuffled order not the original word exactly he would write the shuffled one and present it to person one whose turn is at now so this person is presented with the shuffled word, he is supposed to guess what the actual word would be. If he is able to guess he would get a point and this person would pose a question to the other person and the game goes like this whoever gets the maximum number of points is a winner or it may be draw if both get equal number of points this is how the game will go. So with this kind of strategy let's play this game using out python programming skills. So let's starts with it so we have to play the game so play you have got, we have to play the game so for this there is a warning that could be seen here it says undefined name play so we have said we want to play the game what the thing has to be done we have to define it so let's start defining, define play this is the way by which you would start a function definition so that is play is something that you want to perform this is not something that is already known to the computer so you have to define that this is what is a thing you have to do when i say play so you are giving a definition that's why you have to use def and then the name whatever you wished to give so i start my thing so as he would see second line appear indented indentation matters here so as long as you maintain this level of indentation all this would be considered as the tasks to be done if think play is called so let's start off with what all we need to do so we will have two players may be player one he will have some name let me say player one name player one name let us input the name input for him to input we should ask with a suitable message let me start with the message player one please enter your name so this is for player one same you have to repeat with player two, player two name you have to input here input player two please enter your name so alright we have collected the names of the players so initially both the players will start with zero points so let us assign it the points to player one is zero points to player two is zero again and i said that the turns will be alternated so one player would pose the question and the other will have to answer and the next time it is reverse so there are some turns here instead of the players giving the question we would have the computer question to both the players so the thing is like the computer is the third party which would give the questions of the same difficulty to both the players so there would be no biases also with it that is the idea so we will make the computer pose the questions and both players will get turns alternately just like how it happened in the previous scenarios the turns would be alternated and the question will be post by the computer and answer as to be given by the players. So to keep track of whose turn it is

let us have some variable or turn initially let it be zero it can be any number its generally a practice in computer science to start counting from zero so that is why we have given zero alright so this game will go on in definitely until the player one of them has to stop this is the two player game definitely we need two players only then competitive spirit will be there as long as both are willing to play the game would continue in case if one of them wants to stop then the game would come to an end so we need to continue it definitely that is being taken care of this thing while loop and condition, condition i am given as one that means true so while true will always be true and we would end this only when the player wants to stop that we will see later. We will be dealing with that too now what should the person do, he has to get the question from the computer, this is basically the computers task, computers task that was to be done here what is it doing? It has to picked word there would be some picked word computer will pick some word so it will have some dictionary from that dictionary it will pick some words so choose that will be a function we will define later so computer is choosing some word and it is written as picked word so that one word is picked from which dictionary or from you can considers as it has some list of words from that list it is picking some word so then it has to create the question this is the task is to create the question, create the question so question is created by jumbling the pick word jumbling is nothing but we are just rearranging the letters of the word, you are jumbling the picked word so now once the question is ready you can print the question. So far so good now let us come to the players part first is should maybe we should start off with the player one as the first player then the player two we will alternate it to keep alternating the turns we should keep track of the value of turn. So turn is set to zero so let it be the case that at turn zero the player one will be playing at turn one player two will be playing at turn two again player one will play at turn three player two will play it goes on this way so you would see at the even values of turn it is the chance of the player one at the odd values it is the chance of player two so to keep track of even and odd we will use modular operator that is nothing but operator which would divide and return the reminder of so to get to know if it is even or odd we can divide the turn value by two and see the reminder for all even numbers reminder will divided by two is zero and for odd numbers the reminder is one so that fact will be making use of it here and we will code. So as i said we are going to use the Modular operator if turn modulo true turn modulo to this equals to zero single equal to is assignment and double equal to is the condition check up of equalities so this basically what it does is it will check it will check this expression turn one two that is it will take the value of turn divided by two and check the reminder if that reminder is equal to zero then this segment has to be executed so you have to say that this is this person turn so let me print a message saying player one name we know the name we have got the name of the player, player one name this is your turn alright so i have printed this message so i have to get, i have displayed the question here you would have seen here there is a statement print question so computer has to printed the question so that has displayed the question so i have to ask what's on my mind so that computer is asking what's on my mind so that the computer is asking what's on my mind so it has picked some words what is the actual word co it is asking what's on my wind so you have to get the input for this question the player would given answer that as to be taken as an input so we will do this now. Answer is equal to input of what is on my mind so computer has got some word in its mind so that word the player has to guess so that is the question make sense ok this is the question

posted by the computer and for this question the user will give an answer which would be inputted and stored in this variable ans now if the answer given by the user is exactly equal to the picked word if this answer is exactly equal to the picked word then you are supposed to increase his points by one so he gets one point so there will be some points already player one has score during the run of the game initially it is zero but when the loop goes on as an when the loop goes on the points will change for the players may be one player would have guessed lot of words but another one would not have been able to do so there is the chance that a difference between the scores exist so we will retrieve the precious for add one to and make it the new score so player one point is nothing but his previous point plus one this is his new score and you have to update him of his new score print your score is like i can say it is stored in this variable points of player one which is stored and we have fetched the new value and we have displayed in this score after this also if this answer is right then the score will be incremented otherwise you should say that if answer is wrong. Hence print the some suitable message and say the correct answer it will be i would say better luck next time i thought the word that is stored in the variable picked word so i thought this particular word like this you are displaying the message to the user irrespective of what happens here the next has to be have to ask if he wants to continue the game or not? So that is for that let us use another variable let us call it c, c for continue probably c you take the input from the user if he wants to continue or not? So may be continue quit there is two possibilities so let me post a message press one to continue and zero to quit so he has to decide if he wants to continue or quit so this is the message post and for this the user will give an input which will be captured by the variable c and we have defined zero is for quit we have said to the user that zero is for quit so in case if he says zero that is i want to quit then input c is zero that is he wants to quit then you have to thank the user probably you can say you have to thank both of them actually because till some point have time they would have played so you have to thank both of them player one name, player two name you have to thank both of them and you have to display the points they have scored till now like before this particular word has occurred player two would have scored some point as well as player one would have got something you have to display the somebody. So unique the two points value has you have to tag them by greeting with their names and showing them the summary of the game till now so you have to thank them and you end the loop you quit the game, how do you do that? You use the break statement so once this break statement is encountered this break statement once when it is encountered the corresponding while loop would come to an end so that is the game will come to an end. This is the game ok so if this is for player one this particular thing whatever we are done till now is for player one next what should i do is for player two the procedure is just the same as whatever we have for the player one now the changes what we have to do is instead of player one name player one points we would be using the player two information there that's it so let me copy paste everything copied so let me paste it but indentation has to take care of it this has to be done in case if the turn value is odd so for odd turn value it is player two's turns so i will have to do this indentation so please take care of the indentation it is in the same column, column nine and this is in the column nine yeah this is in the same column and this thing has to be indented now everything looks perfect right? so we have indented this as i said this is not player one this is player two let me make the changes it is player two it is player two and thanking message is just the same whenever if anyone wants

to quit the game comes to an end so you have to thank both of them for their participation till now as well as show them the summary so thanking part is the same just that updating of points defers from player one and player two because each of them have their own task so you need to have two different variables to keep track of both the right let me save till here ok let me revise once again what i have done this is for we start of with the playing of the game here we will ask for the names of the both the players, player one and player two initialise their points zero and to keep track of alternating the turns we use the variable called turn. Computer will create a question here instead of the usual way, where two people will create a question alternatively so this is just for sake because the with the case humans are playing one person has very good vocabulary and he is picking some very difficult words which is not very easy for an average person to guess, he is permuting that he is shuffling the word in a difficult way that may be the case and the other person may choose the simple words that may create the biased state as you could sense till now so to ensure fairness we will give the task of creating the question to the computer so the computer is doing this just guessing what the jumbled word is, is the task of the players so computer starts here this has to be repeated continuously until players want to quit the game so we are using this particular loop while one, computer is choosing the word from its list of words randomly it will choose some words and it will jumbled the picked word and create a question so it is now after creating the question it is displaying the question so you have to alternate the turns so i am using modular operator which would return the reminder after division so for odd numbers it is player two start even number its player one's turn for odd numbers reminder would be one when divided by two and for even numbers that is zero divided by two that's that the taken care of here if turn mod two is equal to zero if it is a even turn then it should be the turn of player one because we are starting the turn with zero that is the usual practice in computer science to count from zero so that is why we are doing it, it's not an issue in case if you start from one as well you can in fact start from any value, the thing is you should alternate the turns between player one and player two as long as you use this mod two as your conditions so this will say this players turn, this is the question has been displayed already what is that the word i have on my mind? That is the question post to the player; the player has to guess his word. So whatever is his he will type the guessed word so if that is the correct guess whatever he has answered is the exact word the computer has picked then the points will be increased by one otherwise there is no increase in points he will intimated of the word the computer has thought and then computer would ask them if you would like to continue the game or quit the game, if they would like to quit you have to greet them you have to thank them for their participation till now and show them the summary of both their scores and you quit the game, you are thanking them you are showing the summary and then you are quitting the game the same goes for player two as well just that updating the points is different see it is the point of the player one is updated and points of player two is updated in case if it is the, so in the turn of the corresponding player his points would be updated in case his answer is correct. That is how this game goes, did you sense any missing gap here , there is a missing gap here also there are some missing definition which we need to do, we would do it in the next videos, in the next video we will see the missing gap and will define and undefined terms now may be choose jumble all these are intuitive to us but the computer may not know what has to be

done so that we need to define them and it is intuitive to us define these things, that all we will do it in the next video thanks for watching.