SNAKES AND LADDERS: NOT ON THE BOARD 04

Alright guys in the previous video you would have seen the method of show board the functionality i had mentioned here, i had written the code board for functionality so that the board is shown to the player now what is pending is the play functionality, let us see what is needed in play functionality ok i had commander it back then because i want you to show that show board functionality works so now play is require so i will remove the ash so that its now no longer a command and now we want play functionality to find play here as i said in this game we having two players p one and p two let us save them p one will have some name because we want to have it as personalised interface, it should not just be like player one player two he had got a sweet name, we need to refer to him by it by his name then he will be very very happy so we need to refer to him by his name and lets input his name from him lets input his name input is taken by this functionality raw input we are inputting a string so it is taken by raw input, string is nothing but a set of characters names generally consists if characters right so that is what technically we call it as string this is a string so we use raw input functionality to input strings so this is the message that has to be displayed. what should we be displaying? Maybe we shall say player one please enter your name looks good alright the same has to be done to player two as well, instead of typing it again let me copy and paste this and do the modifications wherever needed, it is player two's name and it is player two so the first would be inputting the player one's name and then inputting player two's name so let me command that as well for completion sake input player one name this is input player two name why do we have commands is? To help us understand the code at later point of time. Maybe when you are doing this now maybe you will find it later easier but once you have done sufficient number of exercises and when you want to look back at what you had done previously that time there may be some confusions so to avoid that we have commands where we write in English format that is understandable by us we can look back to the commands and then get to know the syntax that has been used and all that, it would be easier for our revision if needed so that is why we are using commands alright, so initially both are starting at that is they don't have their, they have their dice placed on the floor not on the board so they will roll the dice based on what the number appears they will place it on the snake and ladder board so ground let me denote it by point zero player one has points zero this is nothing but i will command this as well initial points of player one, player one has got point zero alright? Ok the same as to be repeated for player two so let me copy and paste it this is for player two so i will just give a summary of this four lines we input player ones name the same we do it for player two then we have set the initial points of both the players to zero and there will be one variable it will denote whose turn it is, let me initialise it with zero, you can initialise it one as well but in computers generally the counting starts from zero so i have done it with zero but it is not mistake even if you start from one so the game will be played continuously so let me say while one this is nothing but an infinite loop the game would be played continuously so i have put an infinite loop here i guess most of you would have some confusion here that i said when you reach the end points the game ends but here i am saying the game will be played continuously how is that possible? You would have it is not

contradicting this is a doubt you may have so it will become clear as the code proceeds there is a check inside whether the end points has been reached or not if end point has been reached then we will break this loop, break this loop is nothing but we come out of the game that is what we call as break this loop this is a infinite loop that will be broken that is the game would end when you reach the end point the check would be perform at a later point alright so turn zero is for player one so i would check turn zero is for player one turn one then i will increase the value of turn by one and i will increment if by one so turn will become one turn one will be for player two turn two will be again for player one turn three will be again for player two so every turn is alternated so if you would observe the pattern here turn zero two four six and so on for player one and turn one three five seven so on are for player two this could be abstracted from this way that to take the value of turn you divide it by two and take the reminder if that is zero that is the turn of player one otherwise it is the turn of player two so to check the reminder we have the operator mod which is denoted by percentage we will be using that now if turn mod two equals equal zero note that single equal to is assignment it is nothing but you are assigning the value as zeros let the value be anything i don't care i want it to be zero then you have to use a single equal to here you have to check the equality i don't want to change the value i want to fetch that value i want to compare it with some standard value in that case you have to use the double equal to symbol please note this point ok if that is the if this is the turn then this is player ones turn player ones turn this is alright this has to be notified to the player so i will print a message player ones name his name has to be mentioned i will say your turn player one this is your turn a message has been put and i had said the player may want to quit the game in the middle as well we have to give him this options till you reach the points hundred i don't want to i want to quit it even that option will have to be given to him for that matlab this will give more personalised feeling that is why we are giving this option as well that i will take it as his choice so c nothing but ask players approval to continue asks players wish, players choice let me say that as players choice to continue this is what will be doing next let me call this as c, c for choice or whether he wants to continue you can take it anyway i will just call this c or you can name it as choice as well that is up to you i am using c input see that was the function i was used previously the raw input that was a specialised function to input strings nothing but something like name or your address something like that to input that you will use raw input here i will ask one or zero one will denote he wants to continue zero denotes he want to quit the game so i would input his choice i will have to say him press one to continue and zero to quit so i will get his input if his choice is zero if the choice is zero i will have to the scores and i will have to quit the game so let me show the scores the points is stored in pp one and pp two, pp one is the points of player one, pp two is points of player two. First the player ones name has to be mentioned player ones name quote here the points this has to be mentioned and the same thing has to be done for player two as well so i am copying and pasting it player two points of player two this is done, you have to mention the points and you have to say quitting the game quitting the game thanks for playing something like that just a humble message, a message has been displayed and now we have to come out of the loop that is this all these are for the user to give a personalised experience to the user we are using all these print statements but what is the instruction to be given to the computer to get out of the loop is this statement break, break statement will come out of the loop and it will end the game basically that's what this will do

here and otherwise if choice is zero this would be executed if not it would just come here observe the indents, indentation is important here it is in the same level of if so if c equals equals to zero this check would be made if the user hasn't pressed zero that is he doesn't want to quit it would come directly to line number forty here which is in the same indent level here you are suppose to roll a dice let me when you roll a dice you would get some number that let me store it in a variable called dice so to roll a dice to stimulate this what happens is what happens when you roll a dice some random number from one to six something from one to six would come when you roll a dice so i to stimulate this what should i give the instruction to the computer is you pick a random number from one to six to give this instruction i have to use this random package random library has to be imported i will say import random this is the library that is needed since we needed it we imported it here now i will say random dot the functionality is randint this is the functionality randint this requires few to give the end points that is what should be the start value and what should be the end value, the start value is one in our case and end value is six, this particular functionality would generate a random number from one two three four five six this is what this functionality is doing, you generate a random number this is basically stimulation of rolling a dice alright we have generated a random number now you are suppose to display what was showed by the dice, print dice showed dice showed the points that is captured by this variables dice so dice showed this point is printed to the user and now once this is once the dice has been rolled you have to add that many number of points to your already, already the points whatever you have to that you must add this points so let us do that. P one this variable p p one stores the points of player one this is nothing whatever is the pint take it you add the value of dice so that will be your new points and when you are playing the snake and ladder sometimes the it may happen that when you reach some position there may be a snake or they may be a ladder so accordingly your points will increase or decrease the change has to occur so to stimulate that let us say the points one is nothing but you check if there is a ladder at this particular points if you think why do i pass the same parameter here and here is this particular line what it does is it will add the points add the points here i guess the name would clarifies so commands is not needed but why do we pass this here and here i will explain, this is the place where you have landed after rolling the dice now you are suppose to check if that particular position has got a ladder if that has got a ladder your points this particular value of this particular value of pp one the points is no longer valid some higher points you would get so that higher value of points would be stored here so that is why we are using same variable pp one in both the cases i hope it is clear in it will be clear when we deal deep into this particular functionality check ladder this may be a ladder a positive thing which will increase your points or it may happened that it is a snake check if it is a snake of the same the same way check ladder and check snake are two functionalities which we will define later these are the things that we have to do and sometimes it may happen that in some points you are all at say ninety five you are at position ninety five and your dice showed six so when you add here ninety five plus six is one not one but your dice has board has just hundred so what will you do then you will stop at hundred and you would say that you have won so that particular check has to be done here so this is i am sorry for this, this is the same players player ones points has to be changed i am sorry for that and here as i had said you have to check in case during this addition process have you gone beyond the end point so in that case you have to

come back to the end point so that check let us make, if the points, points of player one has exceeded end, end point then you are suppose to say you bring it to end point that is ninety five he was present, six came up so he is supposed to go to one not one since the board ended at hundred you stop at hundred that is what we are stimulating here, this is to the functionality here is to check if the player goes beyond the board beyond the board this is being check here alright? Now you are suppose to print him his score as of now you say his name player one name your score your score is this value pp one that is storing the points of player one alright, if he has reached the end points as i have said earlier this is an infinite loop you may wonder that when you have reach the end point you have to quit the game but here we have given an infinite loop now to break this loop we are performing a particular check if you have reached the end, if you have reached the end with this current points that is whether this particular current points is the end point or not here checking if the person has reached the end i am sorry i have used the extra bracket its seems sorry if it's just a space if this if this particular player has reached the end you are suppose to print the message player one name his name you are supposed to give and won player one this person has won the game you are suppose to display it and once you had displayed it you come out of the loop you break that this particular place we are using break because the user wants to quit the game here we are breaking that is here we are quitting the game because one person has reached the end point this is the check for player one this is a player ones turn anything maybe possible right player one may reach the end point player two may reach the end point so we will perform all this checks in player two as well alright let get back to this if turn then else this all this whatever we had done are for player one let us the same as to be repeated for player two so let us copy paste everything copy ok let me paste it this is for player two player two you will modify everything to player two player two sorry this is player one i am sorry for this because here the player wants to quit and we are suppose to display both their points this is player one and player two and now here it is player two is player so his points are added so layer two player two alright player two player two player two player two player two player two layer two player two alright so we are given rough overview of the game let us save this up to here i will give you the summary of what all just happened till now we have inputted the name of two players we have initially set their points to zero and we have some variable called turn which will actually keep track of who has to play now and the turns zero two four six and so on are for player one, one three five seven and so on for player two to keep track of that we are using this particular operator modulo denoted by percentage which will return the reminder after the divisions so we are dividing it by two if the reminder turns out to be zero it is player ones turn otherwise it is player two turn so one thing i guess i skipped here is i skipper here is i should have should have incremented the turn, yeah i should increment the turn right? Once one player has done i should give the chance to the next person so for that i need to increment the turn that i have to do i have done that alright so what in each players turn what are the checks that are being performed let me tell you that, first we say that it is his turn we are asking if he wants to continue or quit if he is quitting we specify the status till now as to how many each person has scored and we are quitting the game, in case he wants to continue we are rolling the dice, dice would give you a number from one to six some random number that number is added to his points and then it is possible that, that particular position there may be a snake or a ladder we will be performing a check there if that is a snake or

ladder and appropriately the points would be changed and in case during the process of rolling a dice the points exceeded the end point as i had given an example earlier if the position was ninety five and the dice showed have six addition would give one not one where as your board just as hundred so end point exceeded so in that case we should bring back to end point so this check has been performed here and after that and after performing all the check after performing the normalisation part we are displaying his score and we are checking if that particular position is the end point or not if the person has reached the end point is declared that this person has won and here we quit the game, the quitting here is due to the users choice quitting here is due to reaching of end point that is the difference here the same thing is done for player two as well alright so the higher level overview of what play does is given to you and check snake check ladder reached end these are the three functionalities we have defined here that is we have we have just given the names here what this particular functionality is suppose to do we will define later we will be defining in next few minutes let's see to it. I hope you have understood what all happened till now you may pause for sometime look back to what has happened, you proceed once you got all the pieces till now clear.