

INTRODUCTION TO WHILE LOOP

I am now going to give you all a scenario where while loops are seemingly important. Assume i am a doctor i have my own clinic, i must treat my patients and assume i am a popular doctor there are a lot of patients and what i do is, i give them the token number, my receptionist gives them with the token numbers. I start with one two three four five and i go on like this and i treat my patients one after the other. How can i write a program for this? I will now write a program for this and put a monitor outside my clinic though which is in the reception area where people can see which token number is being called right now and that concerned person come inside. Let us see how we can achieve this using a while loop. Ok now look at this i will first write the code and then let us understand what this code does? While c is equal to one print token number n may please come in ok? Perfect. What will this n be? It should be a number starting from one and then it should become two it should become three and so on, so it should first be assign one ok, what is c? I will tell you in a minute let me assign c to be one so now what i will do is simply i will say input c equals input continue question mark zero score one what do i mean by this? See you know what happens here? C is a number basically ok so i will say int c, ok c is a number. When c is zero it will come here and it will see while c equals one when c is zero, c is not equal to one so it will not pass this loop, it will not come down, it will not execute this but when c is one it will execute this now you have practised this enough right now given that i have asked you to practice it, you know what while loop is? While loop simply keep executing whatever is below while loop, whatever is below while loop, while loop keeps executing this until, until this becomes false, i repeat repeat repeat when the condition given here is true where? Whatever is inside this bracket after while when the condition is true it will keep executing this, it will keep executing until this becomes false but the moment this becomes false it will come out of it ok? It's like a bomb detonator right? so it will keep executing this keep executing this until this goes false, once this goes false boom it comes out, ok. Let me type here print thank you thank you this is the end of our day rather today ok? Before anything i will say print hello everyone we are starting, now let's see what happens to this. As i execute this the first line will get executed ok, hello everyone we are starting, hello everyone we are starting n becomes one c becomes one while c is one absolutely c is indeed one so you come inside print token number n may please come in, token number one may please come in. Continue continue zero or one if you say one here c will be taken as one but then you see the input always gives c as the string you see we have discussed this many times right? so i make it a number ok? For some time you please ignore this command you just by ignore i mean just write it know that you have to write it. With time you will understand what that is? Right? the one big mistake that people do especially teachers teach everything about programming in one shot it doesn't work you have to have this Mac to ignore a few details and grasp only the most important things with time. These details will become easy on your minds provided you keep looking at it again and again right? so don't worry much about this we will revisit this sometime later ok, actually we have discussed this already but don't worry much about it, it is to convert entity c on to an integer ok fine now i come here and i again go here and then see

continues ok? Continue one ok enter, oh oh! It is saying token number one may please come in. This should not be the case; it should say token number two may please come in correct? So what should i do? I should ensure that i increment c by one ok, increment not c i meant i am very sorry i must increment n by one why? So that next time when it comes it says token number two may please come in so let me come here exit this by pressing zero see it exists, In a moment it will be cleat to you, you may again execute this print hello we are starting hello everyone we are starting, token number one may please come in continue zero or one this is for me ok? if i say one by one i mean the one here is the token number one, the one here is a command to my programme to continue or not ok? when i say one it says token number two may please come in, so what i will do as a doctor i will treat my patient once that patient is done he walks out for the next patient i will say i will enter one here enter, token number three may please come in my next patient comes i treat this little kid and i say bye to the kid and the kid goes out and then i again press one as a doctor it says token number four may please come in, the next person comes in, i treat that patient and then i keep doing this, keep doing this, keep doing this so i am a very hard working medical practicenor so i treat some twenty patients or even more i go on i go on i go on you see and finally i arrive at let say thirty six patients and everybody is done. What do i do now? Continue zero or one right? it says continue zero or one i say i am done. Let me press zero enter it comes out .Thank you this is the end of the day, why does it day that? Because when you press zero c becomes equal to this right? and c becomes equal to zero and when c is not one if it's only one it enters when it is not one it will come out, once it comes out it will say thank you, this is the end of our day. And that's what happened here, as and always I repeat and i will repeat this many times handover the key idea about leaning a programming language, when it comes to a programming language the key idea is repeatedly do the same programme a few times, delete this programme and re do it again delete it and again re do it keep doing this until you are very familiar with what is happening where and then take up more challenges on the same topic and then write your code and there you are, you would become a expert in no time. Right? Take this tip very seriously now close this screen and you try writing this programme all by yourself. How would you make this counter increment and then stop when you ask it to stop by pressing zero ok? Perfect see you all.