

LOOPS: MULTIPLICATION TABLES

Alright so let us do one more exercise from python for loops i am now going to display the tables ok? So initially i will say t equals input what tables would you like to display? And i will take the input that will be t and as and always you know i will say t equals int of t so that it becomes a number otherwise you know we have seen this already it becomes difficult to handle, it becomes characters, strings otherwise ok? So now print t simply just like that lets see what happens here so that we know w are going in a right way. I input ten here and it says ten but what i want is the ten tables here you see, how do i do that? Print t comma and then there must be a multiplication symbol one comma and then is equal to and then the answer t into one right? What's happening here? Observe, let me run this and see. What tables would you like to display? Ten tables. So ten one times is ten is displaying right? so let me display ten two times is equal to t times two whatever the t is, see what tables would you like to display? Ten ones are ten, ten twos are twenty so again let me run instead of ten if i type eight it will display eight ones are eight, eight twos are sixteen correct? Let me go up to some let say one more so how do i do that? Print let me go to three x three comma equals comma t times three execute this, this time let me display ten itself, ten ones are ten, ten twos are twenty, ten threes are thirty remember your tables right? now i want this to be displayed ten times as you know for that i may have to use a formula ok, for see how i am going to use it, for i in range ten print t comma x and then here one two three is given right, i want that to be i here as i varies from zero to ten i comma equals t times i, see the point is you see a pattern here the pattern is one two three that pattern is replaced by this formula so how do we do that? We do that by replacing this pattern by of for loop here ok? Alright so let me now bring these things ok so let's see what happens? I run the file it is showing me some error that's because i haven't put a comma here let me put a comma here ok, again run what table do you like to display? Ten tables perfect! It starts from zero you see, that because for loops starts from zero. Ten zeros zero, ten one times is ten, ten two times it goes up to nine that's because i in range ten means from zero to nine, if you make this eleven and then run ten here and then you will see it goes up to hundred right? Isn't that fun? You can now display any tables let me now display two tables perfect three tables perfect, perfect perfect! Four. Perfect that was all tables from two to ten right? So this is the power of programming where you need not necessarily display tables from one to ten rather zero to ten you can go on up to any number you want by specifying it here. You have now learnt everything of for loop almost, this much is enough for you to start using for loop, very good.