

DISCOUNT CALCULATION

Imagine i walk into a restaurant or let say shop where there is a discount of ten percent which means if you buy something for hundred rupees you actually got to pay only ninety rupees, if you buy something for hundred and fifty rupees you going to pay only one thirty five rupees so you will get a discount of ten percent. Which means whatever is the price you should multiply by point nine? So now let us write a programme which takes as input the cost and then tells you the price after discount basically it must simply multiply by point nine and then give you the answer. Ok now how do i go about this let me teach you something. Print, what is the cost? Alright? What is the cost? And you enter something what should that be cost c is cost c equals input i will say what is the cost? This is how it is done right? End a bracket like this and it will wait for you to enter. When i press one fifty it will takes c as one fifty see print c i am sorry, print within bracket c correct? Now i will say print, let's say answer is equal to c times point nine. It is throwing some error you see you must understand this. Whenever we ask for c the c you wrote one fifty but the computer seized it as, it doesn't see it as a number it sees it as what it called string. Now assume your is like your vehicle can only take diesel it cannot take petrol, if you fill petrol you are doing a huge mistake, you probably making your vehicle unusable correct? So this is now trigged as string on string you cannot do any kind of mathematical operations, there is a way to handle this. What you must do, you must convert the string to a number, if this done by the following way. We say d equals hint of c now print d, this will be a number now this you can do answer equals d times point zero point nine and now if you print answer it will have one three five, if you find it difficult what i said let me start from the beginning ok? So let me clear the screen. I say c equals input right input enter the cost of the item and then you will enter something let say two hundred ok now print c is two hundred you cannot do any addition or subtraction on the c now that's how it is, you might be wondering why? Now all these programming languages comes with its own way of handling, you probably you are wondering how difficulties it to ensure that we the people who made python gave us this facility of manipulating c directly why should we do this? But this is the standard. What should we do? We should say d equals convert this to integer that's the command for it int of c a note if you say d equals integer of c it will show weird error like this, name integer is not defined, if you can guess it is just saying that i don't know, what do you mean by integer. When i say d equals int it knows. It converts the value in c on to an integer like value, so d is now assigned the value two hundred, this two hundred is in d and since it's an integer it is ready to take your arithmetic operations so you can do math on it. So what is my math? Answer will be zero point nine times please note you should put a star here that's the multiplication symbol not your typical x you do in school days ok, if you do that it will show an error, you put an star here, star is on your key board it's just on top of the number eight. Point nine times d that the answer now i will print answer it will give you one eighty is the discounted price after removing ten percent from what you input. Now what is our job? Our job right now would be to write a code for this for an entire thing how do we go about? Print hi how are you doing? Hi how are you, let us compute the final price after discount we say enter right? What is that? C equals input enter the cost of the item and then

you should do `d = int(c)` then you should finally say `answer = 0.9 * d` and finally you must say `print('The cost after discount is', d, 'and the cost after discount is', answer)` and there you are, this will do everything that will wanted to do. First it will print hi how are you etc and then it will say enter the cost, you will enter whatever you enter goes to `c` and then `d` will be a convert of `c`, you are converting the petrol car to the diesel car its something like that ok so that you can you can write the way you want. Ahh see there is a difference between a diesel engine and a petrol engine you cannot treat one like the other correct? So `d = int(c)` so now `d` becomes a integer variable you can do all sorts of mathematical operations on it i told you this how python works so you should not ask lot questions there ha ha! Right? So `answer = 0.9 * d` if you don't understand this is how you compute discount right? Ninety percent of the original value is what you get by ten percent discount if you need a pen and paper to work this out but trust me my math is decent enough that i can tell you that this is the formula. `answer = 0.9 * d` so then finally i print the cost after discount is the answer let us see what happens to this code, go to run and then run this, this is short cut as well f5 to run it, i am doing it the age old way don't call me a bad programmer there are lot of nice ways in which you can run this code but i don't like using a portal like this i like doing it on the command prompt but to make you understand i am using it the old school way so run. Hi how are you? Let us complete the final price of the discount enter the cost; i bought something for thousand rupees, One thousand rupees so what will be my discount? Ten percent gone should be nine hundred let's see and i press enter whoo! Here you are nine hundred. Do you see the speed with the chit computed nine hundred now that is computers that is programming. You write in such a long way what it should do and it executes in like boom! A fraction of a second and that is what makes programming interest. So what did you just now learn? You learn how to write a piece of code to compute the final discount price right? sky is the limit go ahead see this video again and try to write a code which takes a value and then tells you what will happen if you were to sell this item with fifteen percent profit which means if you take something for hundred rupees and you sell it for hundred and fifteen rupees go ahead write the code and see if it works fine or not?