Python Tutorial - Python Full Course for Beginners

Programming with Mosh

Mosh is a software engineer with two decades of experience and I 've taught over 3 million people how to code. He has designed this Python course for anyone who wants to learn Python. In this tutorial I 'm going to show you how to download and install Python on your computer. You will learn how to use Python in machine learning or artificial intelligence. All the materials you 're going to learn in this course will apply to the latest version of Python as well. At the time of recording this video the latest. version is python 3. 7. 2. Chances are in the future , when you are watching this tutorial there is a newer version of. Python available. The first time we run pycharm we 're going to get this warning because this is an application that we download from the internet. So let 's go ahead and open it every time you open it, click on create new project. Make sure that base interpreter is set to Python 3. Mac computers come with an older installation of Python, that 's Python 2. It 's considered legacy which means it 's no longer maintained or supported. So by convention, all Python files should have this py extension.

Preview from Notesale.co.uk
Page 1 of 13

In this Python tutorial , we 're gong to take this program to the next level and make it more interesting. So I 'm going to show you how to draw a doc han. As part of this tutorial you will learn how Python code gets executed and you will also learn about a few programming terms. In the future as you learn more Python you 'll be able to build applications that have a graphical user interface. With this piece of code we can draw 10 asterisks on the terminal. Python interpreter tries to execute line 4 when it executes line 4. It will evaluate the code that we put in between parenthesis. and before the parenthesis , add a space , once again , add an asterisk , space , 10. So let 's run this program one more time , there you go. Are you excited to learn Python and get started on this career path ? If you are, I would encourage you to make a commitment and spend 2 hours every day practicing python. Use the comment box below and let me know why you are learning Python , what do you want to do with it ? What 's your dream job ? I would love to hear your story.

Python interpreter executes our code line by line from the top. On the second line we can update the value of this price variable , so we can reset it to a new value like 20. On line 2, we can define another variable called rating and set it to number 4. 9. Now note that Python is a case sensitive language. Python is sensitive to lower case and upper case letters. In this tutorial, I 'm going to show you how to receive input from the user. So we 're going to write a small program that asks the user 's name and then we 'll print a greeting message customized for that user. In Python we also have functions for common tasks such as printing messages, receiving input , and so on. Mosh has created a cheat sheet with summary notes to review the materials in this course. The

value. If temperature is greater than 30, then we want to print it 's a hot day. Otherwise, if temperature is less than 10, it's a cold day.

This is the greater than operator, we also have greater than or equal to. We have less then , less then, less then or. equal to and finally we have not equal which is an exclamation followed by an equal sign. This is different from the assignment operator that has only one equals sign. If the temperature equals to 30, then you can say it 's a hot day. A message name must be a maximum of 50 characters and finally if we type a proper name here like John Smith and run our program we get name looks good. Here is where we use the dot operator to access all it 's methods or functions , here we call the upper method , this will convert whatever the user enters to upper case and then we 'll convert it to a capital l. In this tutorial I 'm going to show you how to use y loops in python. We use a y loop to execute a block of code multiple times and there are often useful in building interactive programs and games. So in a y statement we write a condition followed by a colon as long as this condition is true the quote that we write in this block will be repeatedly executed. Here is an example. We can define a variable like i as in short for index and set it to 1. And then we set i to i plus 1.

Preview from Notesale.co.uk
Page 4 of 13

In this tutorial I 'm going to show you how to use a y loop to build a guessing game like this. So we have this secret number which is currently set to 9. Now the computer is asking me to make a guess. So with this expression we can repeat a string. When we multiply a string by a number, that string will be repeated. We want to give our user a maximum of three guesses. We need a while loop to repeatedly ask a user to make a guess. So as a best practice , always use meaningful and descriptive names for your variables. So it 's better to rename this variable to guess , count. On a Mac computer it's shift and f 6. If what the user guessed equals our secret number, we need an if statement to tell the user they won. If the user makes the right guess, our while loop is going to get executed 3 times. So we need to change our program such that if the user's right guess is true, we must terminate our loop. The last thing we need is the message that tells the user that they failed if they could not guess the right number. How do we do that ?

If the user guesses the right number , you break this loop , you jump out of it so the code that we write in the else block will not get executed. But if the user can not guess this number, you 're never going to break out of this loop. So this loop will be executed to completion untill this condition becomes false. In that case, the code in the other block will get executed and this is the perfect opportunity for us to tell the user hey, you made three guesses but none of them were right. So, print , sorry you failed. Now, let 's test the program one more time. This time I 'm going to make a wrong guess We define a variable, command, and initially we set it to an empty string. An empty string is a string that has no characters in it. So then we type out our condition as while command does not equal to quit then do something. Now immediately we have a