

## IIT Madras ONLINE DEGREE

Programming in Python
Professor Sudarshan Iyengar
Department of Computer Science and Engineering
Indian Institute of Technology Ropar
Omkar Joshi

Course Instructor

**Indian Institute of Technology Madras Online Degree Program Conclusion** 

Here we are concluding week 2. I hope you people enjoyed the most important parts of Python the syntax per se, beyond this we will be covering this syntax very quickly and we will be talking only about programs. The first two three weeks we will be talking a lot about the construction of the language, the grammar of the language, if I may, so things are slightly less interesting, but it will get more interesting with time.

But I am sure in week 2, you saw some interesting aspects as well. You saw how do you declare variables, the bucket's example that I started off with in the introduction session of week 2. You saw the if loop, how powerful it was, you even wrote a program for Caesar Cipher, the Cipher that takes, the idea that takes text and shifts it by a few units and then it looks garbled.

Nobody can make the sense of what the text is, but then if you shift it back, it starts making sense and we did a piece of code to do this. So, and then we went ahead and saw some string related details, very basic ones though, strings are very, very powerful entities in Python and we will be discussing more of it with time, but as of now you are now confident about handling strings.

And finally and very importantly, we did discuss about this import possibility in Python and I told you a good example, a good analogy would be going to a library and getting books as in when it is required and not storing all the books that you would ever require in your life in your home. You will run out of storage space obviously.

So what you do is, you get as in when it is required and that is precisely what the import functionality does in Python, you say import random, it brings in the library functions from this book so called book called the function called the random, it is actually a library function. Once you get that, it means that you have the entire access to all the functions from this random library and the world is yours.

If you do not include it, you do not have access to those libraries, as simple as that. So we introduced you to the random function; the math library function and I am sure you are

comfortable using these library functions, there are tons and tons of library functions, some of them are built into Python , some of them are external, you need to install that on your computer and start coding.

You want to analyze Facebook data, you want to analyze Twitter data, you want to analyze let us say Covid statistics; there are library functions exclusively meant for this things and we will probably see some of them during the course. I hope you have enjoyed the second week, there is more to come from third week onwards. In fact, third week will the crux of the syntax in Python, let us wait and watch what is coming next. Thank you.

