**Aim**: Identify any OSS and create detailed report about it

**Python**

1. **Idea:** Python was created by [Guido van Rossum](https://gvanrossum.github.io/), and first released on February 20, 1991. While you may know the python as a large snake, the name of the Python programming language comes from an old BBC television comedy sketch series called *Monty Python’s Flying Circus*.
2. **What problems does python solves:** Python defines the types of objects you build into your code. Unlike some other languages such as C, you do not need to declare the object type. The object type is also mutable, you can change the type of object easily and on the fly. There is a wide array of object types built into Python. Objects can change in size. Python objects can also contain mixed data types. Strings and floating point numbers can be part of the same list.
3. **Licensing Model:** The **Python License** is a deprecated [permissive](https://en.wikipedia.org/wiki/Permissive_license) computer [software license](https://en.wikipedia.org/wiki/Software_license) created by the [Corporation for National Research Initiatives](https://en.wikipedia.org/wiki/Corporation_for_National_Research_Initiatives) (CNRI). It was used for versions 1.6 and 2.0 of the [Python programming language](https://en.wikipedia.org/wiki/Python_(programming_language)), both released in the year 2000.The Python License is similar to the [BSD License](https://en.wikipedia.org/wiki/BSD_License) and, while it is a [free software license](https://en.wikipedia.org/wiki/Free_software_license), its wording in some versions meant that it was [incompatible](https://en.wikipedia.org/wiki/License_compatibility) with the [GNU General Public License](https://en.wikipedia.org/wiki/GNU_General_Public_License) (GPL) used by a great deal of free software including the [Linux kernel](https://en.wikipedia.org/wiki/Linux_kernel). For this reason CNRI retired the license in 2001, and the license of current releases is the [Python Software Foundation License](https://en.wikipedia.org/wiki/Python_Software_Foundation_License).
4. **Intent behind making it open source:** Libraries are using open-source software to develop information as well as library services. The purpose of open source is to provide a software that is cheaper, reliable and has better quality. The one feature that makes this software so sought after is that it is free. Libraries in particular benefit from this movement because of the resources it provides. They also promote the same ideas of learning and understanding new information through the resources of other people. Open source allows a sense of community. It is an invitation for anyone to provide information about various topics. The open-source tools even allow libraries to create web-based catalogs.
5. **Monetization Models:**
6. **Code obfuscation** – to ensure that no one can reverse engineer the application.
7. **License verification** – to ensure that customers need a license key before they can use the application (eg. so that you can restrict which features they can use and how long the license is valid).
8. **Webshop**– so that customers can obtain a license key to unlock functionality.
9. **Popularity:** The python language is one of the most accessible programming languages available because it has simplified syntax and not complicated, which gives more emphasis on natural language. Due to its ease of learning and usage, python codes can be easily written and executed much faster than other programming languages.
10. **Impact:** Python offers “Platform Independence” and is supported on all the major platforms including macOS, Linux and Windows. Using Python, the developers can create applications or software that can be deployed on any of the leading operating systems without requiring an interpreter. By simply using the packages such as “PyInstaller” Python based executable code can be prepared to be run in various platforms. This in turn, saves a lot of development as well as testing time that would be spent otherwise for testing the code for different platforms.