



1 The procedure to install Biopython on Ubuntu Linux OS

1. To follow the installation procedure, you need to be connected to the internet.
2. You must have **Synaptic Package Manager** installed on your machine.
3. If not installed, please install **Synaptic Package Manager** using **Ubuntu Software Center**.

1.1 The procedure to install BioPython

1. On Ubuntu 11.04 and higher,
 - (a) Press the **Window** key on your keyboard to open **Dash Home**.
 - (b) Type **Synaptic Package Manager**.
 - (c) Click on the **Synaptic Package Manager** option.
2. Enter your password.
3. Click on **OK**.
4. In the search box type **python**.
5. Click on the **python** check box and click on **Mark for Installation**.
6. Click on **Mark**.
7. Then clear the search box and type **ipython**.
8. Click on the **ipython** check box and click on **Mark for Installation**.
9. Click on **Mark**.
10. Again clear the search box and type **Biopython**.
11. Click on the **python-biopython-doc** check box
12. Click on the **python-biopython-sql** check box
13. Click on the **python-biopython** check box and click on **Mark for Installation**.
14. Click on **Mark**.
15. Finally, click on **Apply**.
16. Again, click **Apply** for installation.
17. The installation will take a few minutes depending on your **internet speed**.

1.2 The procedure to check Biopython installation

1. Open the terminal by pressing **Ctrl + Alt + T** keys together.
2. Now in the terminal type **ipython** and press **Enter**.
3. This will open the **ipython** console.
4. At the prompt type **import Bio** and press **Enter**.
5. If there is no error message, Biopython is installed successfully.
6. To exit from **ipython** console, type **quit**.
7. This will bring you back to the terminal.

2 Installation of Bio Python in Windows OS

1. Please download the latest version of all the exe files that are mentioned below.
 - (a) Python-<https://www.python.org>
 - (b) IPython-<https://ipython.org/install.html>
 - (c) Numpy-<https://numpy.org/install/>
 - (d) Biopython 1.66- <http://biopython.org>
2. Please install these files in the above mentioned order.
3. Double-click on the files and follow all the instructions to install the packages.
4. If you have any problem in installing on Windows OS,
5. Kindly mail us at: contact@spoken-tutorial.org.

2.1 The procedure to check iPython and Biopython installation

1. Open the IPython Command Prompt.
2. The IPython window opens.
3. At the IPython prompt type `import Bio` and press **Enter**.
4. If there is no error message it means Biopython packages are installed successfully.