IN YOUR OWN WORDS AND NO MORE THAN THREE LINES: WHAT IS:

1) A Diffraction Pattern

A diffraction pattern is indicative of the way in which light propagates when passed through a narrow aperture. When light is passed through a slit, it comes out the other side in the form of a series of circular waves, which constitutes the diffraction pattern of light of a specific wavelength.

2) An Electron Density Map

An electron density map gives an indication of the location of electrons in the atoms of a molecule. An electron density map is created through X-ray diffraction experiments, and the X-rays are scattered by the electrons in the sample, giving rise to an electron density map.

3) The meaning of Resolution in Crystallography

Resolution of a crystal refers to the smallest distance between two particles that can be observed through experimental results. Low resolution is better as it indicates that particles that are very close to each other can also be observed as separate entities.

4a) Resolution of 1JSF

1.15 Angstrom

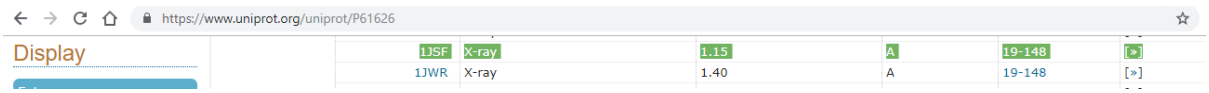
4b) Resolution of Your Structure

2.4 Angstrom

4c) Resolution of 1B9O (below)

1.15 Angstrom

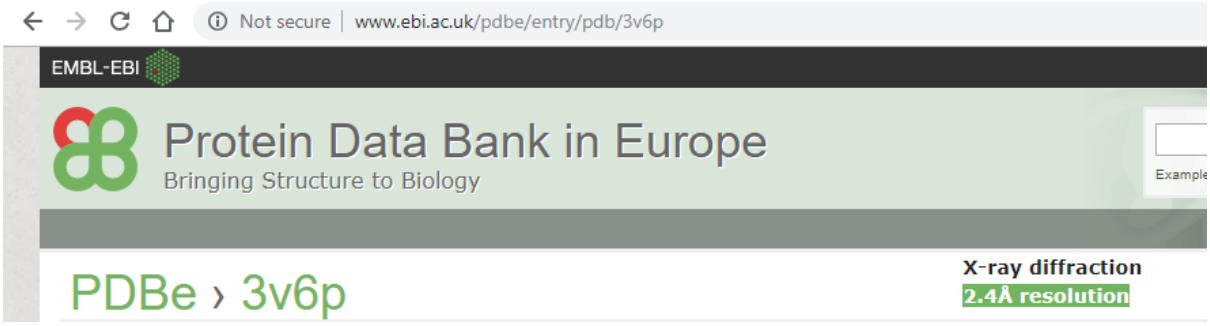
5a) Website IMAGE showing the resolution for 1JSF



5b) Website for 5a

UniProt

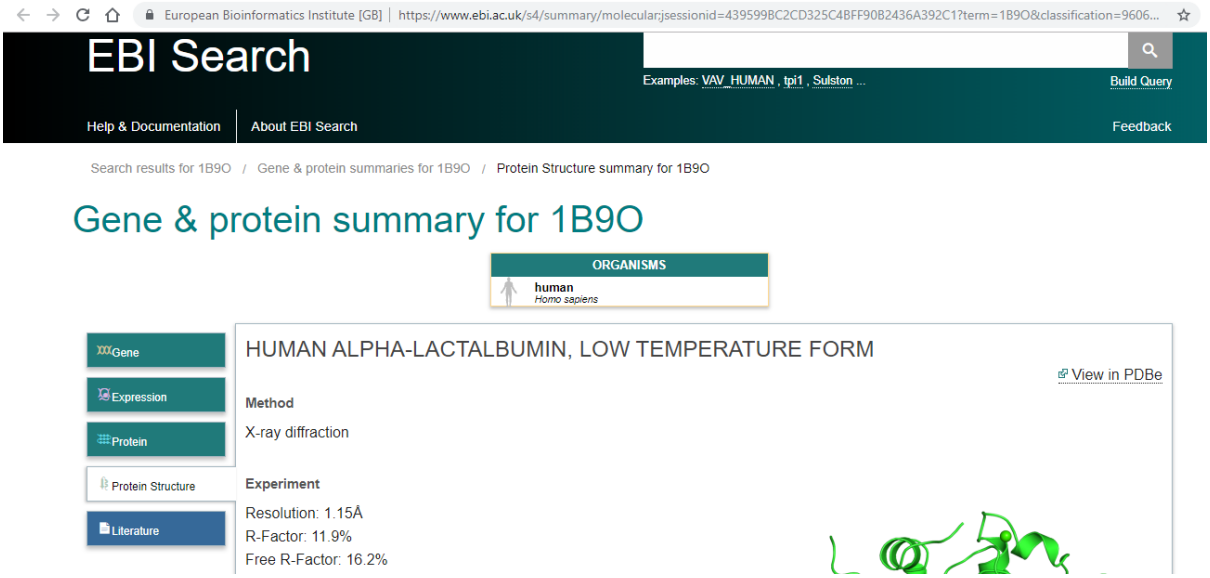
5c) Website IMAGE showing the resolution for Your Structure



5d) Website for 5c

Protein Data Bank - EBI

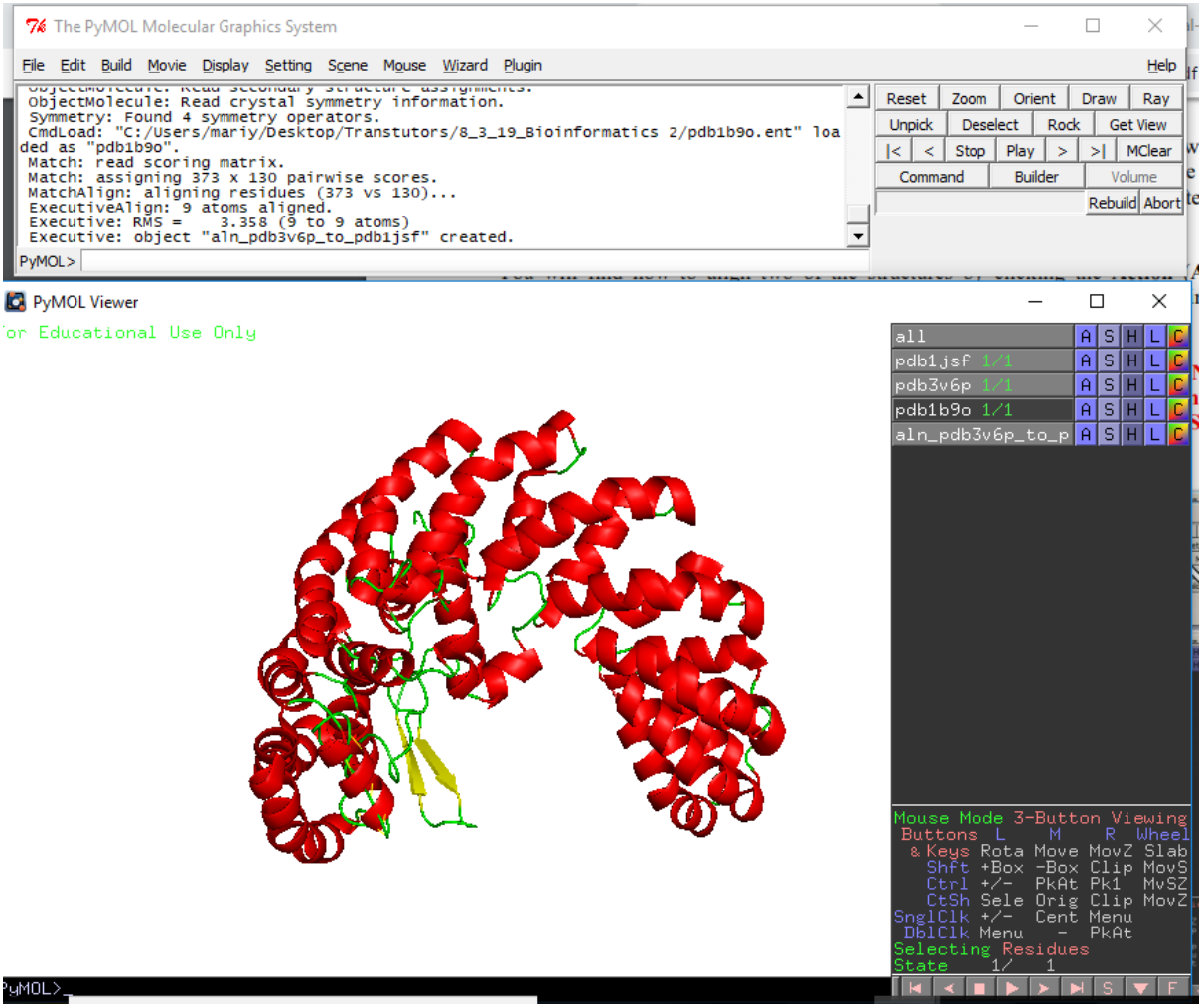
5e) Website IMAGE showing the resolution for 1B9O



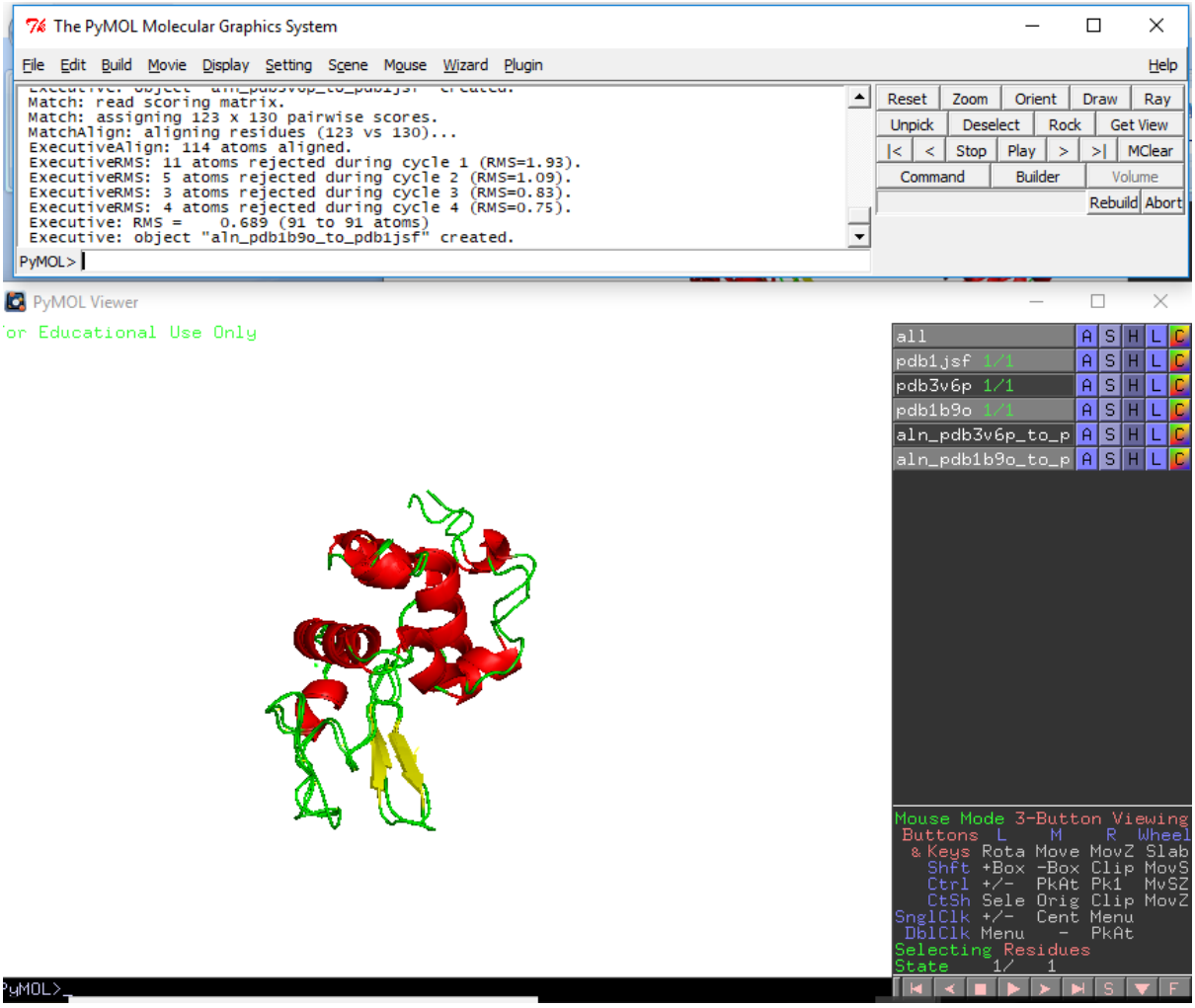
5f) Website for 5e

EBI Search

6) Image showing the alignment of Your Structure TO that of 1JSF



7) Image showing the alignment of 1B9O TO that of 1JSF



8a) rms For Your structure aligned TO 1JSF

3.358

8b) rms For 1B9O aligned TO 1JSF

0.689