In [1]:
```
!pip install py3Dmol
```

Defaulting to user installation because normal site-packages is not writeable
Requirement already satisfied: py3Dmol in c:\users\sakshi\appdata\roaming\python\py
thon311\site-packages (2.4.2)

In [2]:
```
import py3Dmol
```

In [3]:
```
# Load the structure from the Protein Data Bank (PDB) using its ID
view = py3Dmol.view(query='6VSB')
view.setStyle({'cartoon': {'color': 'spectrum'}})
view
```

Out[3]: <py3Dmol.view at 0x2b9c25eb650>

In [4]:
```
# Change Visualization Style
#Sphere Style

view = py3Dmol.view(query='6VSB')
view.setStyle({'sphere': {'color': 'spectrum'}})
view
```

Out[4]:   <py3Dmol.view at 0x2b9c25fa690>

In [5]:   #Line Style

           view = py3Dmol.view(query='pdb:6VSB')
           view.setStyle({'line': {'color': 'greenCarbon'}})
           view

Out[5]:   <py3Dmol.view at 0x2b9c25faf50>

In [6]:
```python
#Stick Style

view = py3Dmol.view(query='pdb:6VSB')
view.setStyle({'stick': {'radius': 0.2}})
view
```

Out[6]:   <py3Dmol.view at 0x2b9c25dc4d0>

In [7]:   ```python
          #Surface Style

          view = py3Dmol.view(query='pdb:6VSB')
          view.addSurface(py3Dmol.VDW, {'opacity': 0.7, 'color': 'lightblue'})
          view
          ```

Out[7]:    <py3Dmol.view at 0x2b9c2604050>

In [8]:    ```python
           #Control the View

           #Zoom In Automatically

           view = py3Dmol.view(query='pdb:6VSB')
           view.setStyle({'cartoon': {'color': 'spectrum'}})
           view.zoomTo()  # Centers and zooms to fit the molecule
           view
           ```

Out[8]: <py3Dmol.view at 0x2b9c2604b90>

In [9]:
```python
#Rotate View

view = py3Dmol.view(query='pdb:6VSB')
view.setStyle({'cartoon': {'color': 'spectrum'}})
view.rotate(90, 'y')  # Rotates molecule 90 degrees along y-axis
view
```

Out[9]:   <py3Dmol.view at 0x2b9c2605350>

In [ ]: