



Water Quality Index (WQI) Calculation-1

```
In [52]: #calculation of pH
data['npH']=data.ph.apply(lambda x: (100 if(8.5>=x>=7)
                                     else(80 if(8.6>=x>=8.5) or (6.9>=x>=6.8)
                                     else (60 if(8.8>=x>=8.6) or (6.8>=x>=6.7)
                                     else(40 if(9>=x>=8.8) or (6.7>=x>=6.5)
                                     else 0))))))
```

```
In [53]: #calculation of dissolved oxygen
data['ndo']=data.do.apply(lambda x: (100 if(x>=6)
                                     else(80 if(6>=x>=5.1)
                                     else (60 if(5>=x>=4.1)
                                     else(40 if(4>=x>=3)
                                     else 0))))))
```