```
Unnamed:
Out[2]:
                                        DOJ
                                                DOL Designation
                                                                  JobCity Gender
                                                                                   DOB 10percentage ... ComputerScience MechanicalEngg ElectricalEngg TelecomEngg CivilEngg c
                                 Salary
                                                          senior
                                                                                 2/19/90
                                       6/1/12
                 train 203097
                               420000.0
                                                                Bangalore
                                                                                                84.3 ...
                                                                                                                                                              -1
                                                                                                                                                                       -1
                                              present
                                                          quality
                                         0:00
                                                                                    0:00
                                                        engineer
                                       9/1/13
                                                                                 10/4/89
                                                        assistant
                               500000.0
                                                                                                                                                              -1
          1
                 train 579905
                                              present
                                                                   Indore
                                                                                                85.4 ...
                                                                                                                     -1
                                                                                                                                    -1
                                                                                                                                                 -1
                                                                                                                                                                       -1
                                         0:00
                                                                                    0:00
                                                        manager
                                                                                  8/3/92
                                                        systems
                              325000.0
                                                                                                                                                              -1
          2
                 train 810601
                                                                  Chennai
                                                                                                85.0 ...
                                                                                                                     -1
                                                                                                                                    -1
                                                                                                                                                 -1
                                                                                                                                                                       -1
                                              present
                                         0:00
                                                                                   0:00
                                                        engineer
                                                          senior
                                       7/1/11
                                                                                 12/5/89
                 train 267447 1100000.0
          3
                                                                 Gurgaon
                                                                                                                                    -1
                                                                                                                                                 -1
                                                                                                                                                              -1
                                                                                                                                                                       -1
                                              present
                                                        software
                                                                                                85.6 ...
                                                                                                                     -1
                                         0:00
                                                                                    0:00
                                                        engineer
                                               3/1/15
                                       3/1/14
                                                                                 2/27/91
                 train 343523
                              200000.0
                                                                                                                     -1
                                                                                                                                    -1
                                                                                                                                                              -1
                                                                                                                                                                       -1
          4
                                                                 Manesar
                                                                                                78.0 ...
                                                                                                                                                 -1
                                                            get
                                         0:00
         5 rows × 39 columns
In [3]: df.info()
          <class 'pandas.core.frame.DataFrame'>
          RangeIndex: 3998 entries, 0 to 3997
          Data columns (total 39 columns):
           #
               Column
                                        Non-Null Count Dtype
                                        3998 non-null
           0
               Unnamed: 0
                                                          object
                                        3998 non-null
           1
               ID
                                                          int64
           2
                                        3998 non-null
                                                          float64
               Salary
           3
                                        3998 non-null
               DOJ
                                                          object
           4
                                        3998 non-null
               DOL
                                                          object
           5
               Designation
                                        3998 non-null
                                                          object
           6
               JobCity
                                        3998 non-null
                                                          object
           7
               Gender
                                        3998 non-null
                                                          object
                                        3998 non-null
                                                          object
           8
               D0B
                                        3998 non-null
                                                          float64
           9
               10percentage
               10board
                                        3998 non-null
                                                          object
           10
                                        3998 non-null
               12graduation
                                                          int64
           11
                                                          float64
               12percentage
                                        3998 non-null
           12
           13
               12board
                                        3998 non-null
                                                          object
               CollegeID
                                        3998 non-null
                                                          int64
           14
               CollegeTier
                                        3998 non-null
                                                          int64
           15
                                        3998 non-null
                                                          object
           16
               Degree
           17
               Specialization
                                        3998 non-null
                                                          object
               collegeGPA
                                        3998 non-null
                                                          float64
           18
               CollegeCityID
           19
                                        3998 non-null
                                                          int64
           20
               CollegeCityTier
                                        3998 non-null
                                                          int64
           21
               CollegeState
                                        3998 non-null
                                                          object
           22
               GraduationYear
                                        3998 non-null
                                                          int64
           23
               English
                                        3998 non-null
                                                          int64
           24
               Logical
                                        3998 non-null
                                                          int64
           25
               Quant
                                        3998 non-null
                                                          int64
           26
               Domain
                                        3998 non-null
                                                          float64
           27
               ComputerProgramming
                                         3998 non-null
                                                          int64
               ElectronicsAndSemicon
                                        3998 non-null
                                                          int64
           28
                                        3998 non-null
           29
               ComputerScience
                                                          int64
           30
               MechanicalEngg
                                        3998 non-null
                                                          int64
                                        3998 non-null
           31
               ElectricalEngg
                                                          int64
           32
               TelecomEngg
                                        3998 non-null
                                                          int64
                                        3998 non-null
                                                          int64
           33
               CivilEngg
               conscientiousness
                                        3998 non-null
                                                          float64
           34
           35
                                        3998 non-null
                                                          float64
               agreeableness
           36
                                        3998 non-null
               extraversion
                                                          float64
           37
               nueroticism
                                        3998 non-null
                                                         float64
               openess_to_experience
                                                        float64
           38
                                        3998 non-null
          dtypes: float64(10), int64(17), object(12)
          memory usage: 1.2+ MB
 In [4]: df.shape
          (3998, 39)
Out[4]:
          df.columns
 In [5]:
          '12percentage', '12board', 'CollegeID', 'CollegeTier', 'Degree',
                  'Specialization', 'collegeGPA', 'CollegeCityID', 'CollegeCityTier',
                 'CollegeState', 'GraduationYear', 'English', 'Logical', 'Quant', 'Domain', 'ComputerProgramming', 'ElectronicsAndSemicon',
                  'ComputerScience', 'MechanicalEngg', 'ElectricalEngg', 'TelecomEngg',
                  'CivilEngg', 'conscientiousness', 'agreeableness', 'extraversion',
                  'nueroticism', 'openess_to_experience'],
                dtype='object')
In [6]: df.nunique()
                                        1
          Unnamed: 0
Out[6]:
                                     3998
          ID
          Salary
                                      177
          DOJ
                                       81
          D0L
                                       67
          Designation
                                      419
          JobCity
                                      339
          Gender
                                        2
          D0B
                                     1872
          10percentage
                                      851
          10board
                                      275
          12graduation
                                       16
                                      801
          12percentage
                                      340
          12board
          CollegeID
                                     1350
          CollegeTier
                                        2
                                        4
          Degree
                                       46
          Specialization
          collegeGPA
                                     1282
          CollegeCityID
                                     1350
          CollegeCityTier
                                        2
          CollegeState
                                       26
          GraduationYear
                                       11
          English
                                      111
          Logical
                                      107
          Quant
                                      138
                                      243
          Domain
                                       79
          ComputerProgramming
          ElectronicsAndSemicon
                                       29
                                       20
          ComputerScience
          MechanicalEngg
                                       42
                                       31
          ElectricalEngg
                                       26
          TelecomEngg
                                       23
          CivilEngg
          conscientiousness
                                      141
          agreeableness
                                      149
          extraversion
                                      154
          nueroticism
                                      217
          openess_to_experience
                                      142
          dtype: int64
In [10]: df = df.drop(columns=['Unnamed: 0', 'ID', 'CollegeID', 'CollegeCityID'])
In [11]: | df.head()
                                                                  DOB 10percentage
                       DOJ
                              DOL Designation
                                                JobCity Gender
                                                                                       10board 12graduation ... ComputerScience MechanicalEngg ElectricalEngg TelecomEngg Civili
Out[11]:
               Salary
                                                                                         board
                                         senior
                      6/1/12
                                                                2/19/90
             420000.0
                                                                                                                           -1
                                                                                                                                          -1
                                                                                                                                                       -1
                                                                                                                                                                    -1
                                         quality
                                               Bangalore
                                                                               84.3 ofsecondary
                                                                                                      2007 ...
                       0:00
                                                                  0:00
                                       engineer
                                                                                    education,ap
                      9/1/13
                                       assistant
                                                                10/4/89
                                                  Indore
             500000.0
                            present
                                                                               85.4
                                                                                          cbse
                                                                                                      2007 ...
                      6/1/14
                                                                 8/3/92
                                       systems
             325000.0
                            present
                                                                                                      2010 ...
                                                 Chennai
                                                                               85.0
                                                                                          cbse
                                                                                                                           -1
                                                                                                                                          -1
                                                                                                                                                       -1
                                                                                                                                                                    -1
                                       engineer
                                         senior
                      7/1/11
                                                                12/5/89
          3 1100000.0
                                                                               85.6
                                       software
                                                                                          cbse
                                                                                                      2007 ...
                                                                                                                                          -1
                                                                                                                                                       -1
                            present
                                                Gurgaon
                                       engineer
                      3/1/14
                              3/1/15
                                                                2/27/91
             200000.0
                                                                               78.0
                                                                                          cbse
                                                                                                      2008 ...
                                                                                                                                          -1
                                                                                                                                                       -1
                                                                                                                                                                    -1
                                           get
                                                Manesar
                               0:00
                                                                  0:00
         5 rows × 35 columns
```

In []

In [1]: **import** pandas **as** pd

import numpy as np

In [2]: df = pd.read_csv(r"C:\Users\NITISH SINGH\Downloads\data.xlsx - Sheet1.csv")