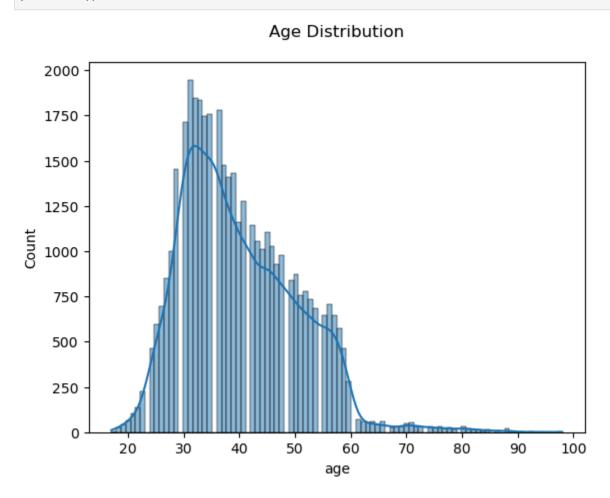
```
In [44]: import pandas as pd
           import seaborn as sns
           import matplotlib.pyplot as plt
           %matplotlib inline
          df = pd.read_csv("BANKDATA.csv", sep=';')
          df.head(3)
In [57]:
                                                 default housing loan
                                                                        contact month day_of_week ... campaign pdays previous
                        job marital
                                     education
                                                                                                                                  poutcome emp.var.rate cons.price.idx cons.conf.idx euribor3m nr.employed y
Out[57]:
              age
                                                                                                                                                               93.994
                                                                                                                                                                                        4.857
                                                                                                                                                                                                   5191.0 no
              56
                  housemaid
                             married
                                       basic.4y
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                                                                                                                    999
                                                                                                                               0 nonexistent
                                                                                                                                                    1.1
                                                                                                                                                                              -36.4
                                                                                                                                                               93.994
          1 57
                     services married high.school unknown
                                                                   no telephone
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                                                                                                                    999
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                     services married high.school
                                                                                               mon ...
                                                                                                                               0 nonexistent
          3 rows × 21 columns
          df.isnull().sum()
                                         #Checking Missing values
                               0
          age
Out[58]:
          job
                               0
          marital
                                0
          education
                               0
          default
                               0
                               0
          housing
          loan
                                0
                               0
          contact
                               0
          month
                               0
          day_of_week
                               0
          duration
                               0
           campaign
                               0
           pdays
           previous
                               0
           poutcome
                               0
          emp.var.rate
                               0
          cons.price.idx
                               0
          cons.conf.idx
                               0
          euribor3m
                               0
          nr.employed
                               0
                               0
           dtype: int64
          df[df.duplicated()]
In [59]:
                                 marital
                                                education
                                                                                  contact month day_of_week ... campaign pdays previous poutcome emp.var.rate cons.price.idx cons.conf.idx euribor3m nr.employed
Out[59]:
                  age
                           job
                                                           default housing loan
                          blue-
                  39
                                                                                                                                                                          93.994
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           12261
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           14234
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           16956
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                                               high.school
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           18465
                  32 technician
                                  single professional.course
                                                                                   cellular
                                                                                              jul
                                                                                                          thu ...
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                        services
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20534 41 technician professional.course cellular tue ... 1 999 0 nonexistent 1.4 93.444 -36.1 4.966 5228.1 no married no yes no aug 999 93.200 25217 tue ... 2 0 nonexistent -0.1 -42.0 4.153 5195.8 no 39 admin. married university.degree no no no cellular nov high.school 28477 24 services single no yes no cellular apr tue ... 999 0 nonexistent -1.8 93.075 -47.1 1.423 5099.1 no 32516 university.degree fri ... 4 999 0 nonexistent -1.8 92.893 -46.2 1.313 5099.1 no 35 admin. married cellular no yes no may 36951 45 admin. university.degree cellular thu ... 1 999 0 nonexistent -2.9 92.469 -33.6 1.072 5076.2 yes married no no no jul **38281** 71 92.431 tue ... 999 -3.4 -26.9 0.742 5017.5 no retired single university.degree telephone 1 0 nonexistent no no no oct

12 rows × 21 columns

In [60]: sns.histplot(x="age", data=df, kde=True) plt.title("Age Distribution\n") plt.show()



In []