```
174
           # apropriado para este tipo de dados
175
   -=-=-=-=-=
176
177
           preds, clts = AuxiliaryFunctions.
   UnsupervidedKmens(reduced data,pca samples)
           for i, pred in enumerate (preds):
178
179
               print("Sample point", i, "predicted to be in
   Kmeans", pred)
180
181
          for ct in range(10):
182
               rd = np.random.randint(0, 3300)
183
               print("Predição de {}: {}".format(rd, clts.
   predict(reduced data.iloc[rd, :].values.reshape(1, -1))))
184
           for j in range (3300):
185
               verificacao[k][j] = clts.predict(reduced data
   .iloc[j, :].values.reshape(1, -1))
           k += 1
186
187
188
   # =-=-=-=-=-=-=-=-=-=-=-=-=-=
   -=-=-=-=-=
189
           # implementação dos teste de validaçãod e
   resultado
190
191
           # apropriado para este tipo de dados
192
   # =-=-=-=-=-=-=-=-=-=-=
   -=-=-=-=-=
193
           moda = [0,0,0,0,0,0,0,0,0,0]
194
195
196
           verifica =pd.DataFrame(verificacao)
197
           for m in range (0,11):
198
               mod = verifica.mode()[8][m*300:299+m*300]
199
               moda[m] = mod
200
201
           for n in range (3300):
202
               if (verifica[8][n]) == moda[0]:
203
                      verifica[8][n] = 1
204
               elif (verifica[8][n]) == moda[1]:
205
                      verifica[8][n]= 2
206
               elif (verifica[8][n]) == moda[2]:
207
                   verifica[8][n] = 3
```