```
C:\Users\hp\AppData\Local\Programs\Python\Python311\python.exe D:\pythonProject\Face-Recognition_Att_Proj\Face_recog_MTCNN_FACENET\train_v2.py
2023-10-09 22:06:50.620877: I tensorflow/core/platform/cpu_feature_guard.cc:182] This TensorFlow binary is optimized to use available CPU instructions in performance-critical operations.
To enable the following instructions: SSE SSE2 SSE3 SSE4.1 SSE4.2 AVX AVX2 AVX_VNNI FMA, in other operations, rebuild TensorFlow with the appropriate compiler flags.
1/1 [==============================] - 0s 145ms/step
1/1 [==============================] - 0s 61ms/step
1/1 [==============================] - 0s 19ms/step
1/1 [==============================] - 0s 15ms/step
1/1 [==============================] - 0s 16ms/step
1/1 [==============================] - 0s 17ms/step
1/1 [==============================] - 0s 16ms/step
1/1 [==============================] - 0s 14ms/step
1/1 [==============================] - 0s 14ms/step
1/1 [==============================] - 0s 63ms/step
1/1 [==============================] - 0s 78ms/step
```

```
15 1/1 [==============================] - 1s 1s/
   step
16 1/1 [==============================] - 0s
   23ms/step
17 1/1 [==============================] - 0s
   20ms/step
18 1/1 [==============================] - 0s
   20ms/step
19 1/1 [==============================] - 0s
   17ms/step
20 1/1 [==============================] - 0s
   19ms/step
21 1/1 [==============================] - 0s
   14ms/step
22 1/1 [==============================] - 0s
   15ms/step
23 1/1 [==============================] - 0s
   13ms/step
24 1/1 [==============================] - 0s
   14ms/step
25 1/1 [==============================] - 0s
   17ms/step
26 1/1 [==============================] - 0s
   20ms/step
27 1/1 [==============================] - 0s
   53ms/step
28 1/1 [==============================] - 0s
   24ms/step
29 1/1 [==============================] - 0s
   22ms/step
30 1/1 [==============================] - 0s
   18ms/step
31 1/1 [==============================] - 0s
   17ms/step
32 1/1 [==============================] - 0s
```

```
32 14ms/step
33 1/1 [==============================] - 0s
   13ms/step
34 1/1 [==============================] - 0s
   12ms/step
35 1/1 [==============================] - 0s
   21ms/step
36 1/1 [==============================] - 0s
   15ms/step
37 1/1 [==============================] - 0s
   18ms/step
38 1/1 [==============================] - 0s
   16ms/step
39 1/1 [==============================] - 0s
   51ms/step
40 1/1 [==============================] - 0s
   25ms/step
41 1/1 [==============================] - 0s
   19ms/step
42 1/1 [==============================] - 0s
   19ms/step
43 1/1 [==============================] - 0s
   16ms/step
44 1/1 [==============================] - 0s
   18ms/step
45 1/1 [==============================] - 0s
   16ms/step
46 1/1 [==============================] - 0s
   14ms/step
47 1/1 [==============================] - 0s
   14ms/step
48 1/1 [==============================] - 0s
   14ms/step
49 1/1 [==============================] - 0s
   19ms/step
```

```
50 1/1 [==============================] - 0s
   24ms/step
51 1/1 [==============================] - 0s
   52ms/step
52 1/1 [==============================] - 0s
   24ms/step
53 1/1 [==============================] - 0s
   20ms/step
54 1/1 [==============================] - 0s
   22ms/step
55 1/1 [==============================] - 0s
   17ms/step
56 1/1 [==============================] - 0s
   14ms/step
57 1/1 [==============================] - 0s
   15ms/step
58 1/1 [==============================] - 0s
   14ms/step
59 1/1 [==============================] - 0s
   17ms/step
60 1/1 [==============================] - 0s
   19ms/step
61 1/1 [==============================] - 0s
   18ms/step
62 1/1 [==============================] - 0s
   18ms/step
63 1/1 [==============================] - 0s
   51ms/step
64 1/1 [==============================] - 0s
   30ms/step
65 1/1 [==============================] - 0s
   21ms/step
66 1/1 [==============================] - 0s
   17ms/step
67 1/1 [==============================] - 0s
```

```
67 16ms/step
68 1/1 [==============================] - 0s
   14ms/step
69 1/1 [==============================] - 0s
   14ms/step
70 1/1 [==============================] - 0s
   21ms/step
71 1/1 [==============================] - 0s
   17ms/step
72 1/1 [==============================] - 0s
   15ms/step
73 1/1 [==============================] - 0s
   18ms/step
74 1/1 [==============================] - 0s
   18ms/step
75 1/1 [==============================] - 0s
   64ms/step
76 1/1 [==============================] - 0s
   23ms/step
77 1/1 [==============================] - 0s
   19ms/step
78 1/1 [==============================] - 0s
   18ms/step
79 1/1 [==============================] - 0s
   16ms/step
80 1/1 [==============================] - 0s
   19ms/step
81 1/1 [==============================] - 0s
   18ms/step
82 1/1 [==============================] - 0s
   17ms/step
83 1/1 [==============================] - 0s
   16ms/step
84 1/1 [==============================] - 0s
   16ms/step
```

```
 85 1/1 [==============================] - 0s
    24ms/step
 86 1/1 [==============================] - 0s
    19ms/step
 87 1/1 [==============================] - 0s
    54ms/step
 88 1/1 [==============================] - 0s
    23ms/step
 89 1/1 [==============================] - 0s
    27ms/step
 90 1/1 [==============================] - 0s
    19ms/step
 91 1/1 [==============================] - 0s
    16ms/step
 92 1/1 [==============================] - 0s
    16ms/step
 93 1/1 [==============================] - 0s
    16ms/step
 94 1/1 [==============================] - 0s
    19ms/step
 95 1/1 [==============================] - 0s
    15ms/step
 96 1/1 [==============================] - 0s
    15ms/step
 97 1/1 [==============================] - 0s
    16ms/step
 98 1/1 [==============================] - 0s
    15ms/step
 99 1/1 [==============================] - 0s
    63ms/step
100 2023-10-09 22:06:58.929457: W tensorflow/tsl
    /framework/cpu_allocator_impl.cc:83]
    Allocation of 186551200 exceeds 10% of free
    system memory.
101 2023-10-09 22:06:59.033170: W tensorflow/tsl
```

```
101 /framework/cpu_allocator_impl.cc:83]
    Allocation of 186551200 exceeds 10% of free
    system memory.
102 2023-10-09 22:06:59.033329: W tensorflow/tsl
    /framework/cpu_allocator_impl.cc:83]
    Allocation of 186551200 exceeds 10% of free
    system memory.
103 2023-10-09 22:06:59.352638: W tensorflow/tsl
    /framework/cpu_allocator_impl.cc:83]
    Allocation of 148125824 exceeds 10% of free
    system memory.
104 2023-10-09 22:06:59.398635: W tensorflow/tsl
    /framework/cpu_allocator_impl.cc:83]
    Allocation of 148125824 exceeds 10% of free
    system memory.
105 1/1 [==============================] - 1s
    613ms/step
106 1/1 [==============================] - 0s
    251ms/step
107 1/1 [==============================] - 0s
    135ms/step
108 1/1 [==============================] - 0s
    76ms/step
109 1/1 [==============================] - 0s
    52ms/step
110 1/1 [==============================] - 0s
    39ms/step
111 1/1 [==============================] - 0s
    32ms/step
112 1/1 [==============================] - 0s
    24ms/step
113 1/1 [==============================] - 0s
    21ms/step
114 1/1 [==============================] - 0s
    19ms/step
```

```
115 1/1 [==============================] - 0s
    15ms/step
116 1/1 [==============================] - 0s
    18ms/step
117 1/1 [==============================] - 0s
    16ms/step
118 1/1 [==============================] - 0s
    15ms/step
119 1/1 [==============================] - 0s
    14ms/step
120 99/99 [==============================] - 1s
    5ms/step
121 4/4 [==============================] - 0s
    17ms/step
122 1/1 [==============================] - 0s
    70ms/step
123 1/1 [==============================] - 1s
    519ms/step
124 1/1 [==============================] - 0s
    254ms/step
125 1/1 [==============================] - 0s
    135ms/step
126 1/1 [==============================] - 0s
    77ms/step
127 1/1 [==============================] - 0s
    51ms/step
128 1/1 [==============================] - 0s
    34ms/step
129 1/1 [==============================] - 0s
    27ms/step
130 1/1 [==============================] - 0s
    23ms/step
131 1/1 [==============================] - 0s
    18ms/step
132 1/1 [==============================] - 0s
```

```
132 14ms/step
133 1/1 [==============================] - 0s
    16ms/step
134 1/1 [==============================] - 0s
    16ms/step
135 1/1 [==============================] - 0s
    13ms/step
136 1/1 [==============================] - 0s
    15ms/step
137 1/1 [==============================] - 0s
    18ms/step
138 151/151 [==============================] -
    1s 5ms/step
139 7/7 [==============================] - 0s
    17ms/step
140 1/1 [==============================] - 0s
    55ms/step
141 1/1 [==============================] - 0s
    24ms/step
142 1/1 [==============================] - 0s
    25ms/step
143 1/1 [==============================] - 0s
    17ms/step
144 1/1 [==============================] - 0s
    17ms/step
145 1/1 [==============================] - 0s
    18ms/step
146 1/1 [==============================] - 0s
    18ms/step
147 1/1 [==============================] - 0s
    16ms/step
148 1/1 [==============================] - 0s
    15ms/step
149 1/1 [==============================] - 0s
    14ms/step
```

```
150 1/1 [==============================] - 0s
    18ms/step
151 1/1 [==============================] - 0s
    18ms/step
152 1/1 [==============================] - 0s
    50ms/step
153 1/1 [==============================] - 0s
    25ms/step
154 1/1 [==============================] - 0s
    21ms/step
155 1/1 [==============================] - 0s
    19ms/step
156 1/1 [==============================] - 0s
    16ms/step
157 1/1 [==============================] - 0s
    17ms/step
158 1/1 [==============================] - 0s
    21ms/step
159 1/1 [==============================] - 0s
    18ms/step
160 1/1 [==============================] - 0s
    15ms/step
161 1/1 [==============================] - 0s
    15ms/step
162 1/1 [==============================] - 0s
    16ms/step
163 1/1 [==============================] - 0s
    17ms/step
164 1/1 [==============================] - 0s
    56ms/step
165 1/1 [==============================] - 0s
    24ms/step
166 1/1 [==============================] - 0s
    20ms/step
167 1/1 [==============================] - 0s
```

```
167 20ms/step
168 1/1 [==============================] - 0s
    17ms/step
169 1/1 [==============================] - 0s
    18ms/step
170 1/1 [==============================] - 0s
    15ms/step
171 1/1 [==============================] - 0s
    15ms/step
172 1/1 [==============================] - 0s
    19ms/step
173 1/1 [==============================] - 0s
    16ms/step
174 1/1 [==============================] - 0s
    16ms/step
175 1/1 [==============================] - 0s
    20ms/step
176 1/1 [==============================] - 0s
    60ms/step
177 1/1 [==============================] - 0s
    25ms/step
178 1/1 [==============================] - 0s
    22ms/step
179 1/1 [==============================] - 0s
    18ms/step
180 1/1 [==============================] - 0s
    16ms/step
181 1/1 [==============================] - 0s
    21ms/step
182 1/1 [==============================] - 0s
    16ms/step
183 1/1 [==============================] - 0s
    14ms/step
184 1/1 [==============================] - 0s
    15ms/step
```

```
185 1/1 [==============================] - 0s
    15ms/step
186 1/1 [==============================] - 0s
    24ms/step
187 1/1 [==============================] - 0s
    19ms/step
188 1/1 [==============================] - 0s
    53ms/step
189 1/1 [==============================] - 0s
    24ms/step
190 1/1 [==============================] - 0s
    27ms/step
191 1/1 [==============================] - 0s
    19ms/step
192 1/1 [==============================] - 0s
    17ms/step
193 1/1 [==============================] - 0s
    15ms/step
194 1/1 [==============================] - 0s
    15ms/step
195 1/1 [==============================] - 0s
    21ms/step
196 1/1 [==============================] - 0s
    17ms/step
197 1/1 [==============================] - 0s
    15ms/step
198 1/1 [==============================] - 0s
    18ms/step
199 1/1 [==============================] - 0s
    19ms/step
200 1/1 [==============================] - 0s
    72ms/step
201 1/1 [==============================] - 0s
    24ms/step
202 1/1 [==============================] - 0s
```

```
202 21ms/step
203 1/1 [==============================] - 0s
    19ms/step
204 1/1 [==============================] - 0s
    17ms/step
205 1/1 [==============================] - 0s
    19ms/step
206 1/1 [==============================] - 0s
    16ms/step
207 1/1 [==============================] - 0s
    12ms/step
208 1/1 [==============================] - 0s
    14ms/step
209 1/1 [==============================] - 0s
    13ms/step
210 1/1 [==============================] - 0s
    19ms/step
211 1/1 [==============================] - 0s
    17ms/step
212 1/1 [==============================] - 0s
    56ms/step
213 1/1 [==============================] - 0s
    24ms/step
214 1/1 [==============================] - 0s
    26ms/step
215 1/1 [==============================] - 0s
    19ms/step
216 1/1 [==============================] - 0s
    16ms/step
217 1/1 [==============================] - 0s
    17ms/step
218 1/1 [==============================] - 0s
    14ms/step
219 1/1 [==============================] - 0s
    14ms/step
```

```
220 1/1 [==============================] - 0s
    18ms/step
221 1/1 [==============================] - 0s
    16ms/step
222 1/1 [==============================] - 0s
    17ms/step
223 1/1 [==============================] - 0s
    23ms/step
224 1/1 [==============================] - 0s
    55ms/step
225 1/1 [==============================] - 0s
    26ms/step
226 1/1 [==============================] - 0s
    20ms/step
227 1/1 [==============================] - 0s
    24ms/step
228 1/1 [==============================] - 0s
    16ms/step
229 1/1 [==============================] - 0s
    17ms/step
230 1/1 [==============================] - 0s
    15ms/step
231 1/1 [==============================] - 0s
    15ms/step
232 1/1 [==============================] - 0s
    19ms/step
233 1/1 [==============================] - 0s
    17ms/step
234 1/1 [==============================] - 0s
    18ms/step
235 1/1 [==============================] - 0s
    18ms/step
236 1/1 [==============================] - 0s
    54ms/step
237 1/1 [==============================] - 0s
```

```
237 25ms/step
238 1/1 [==============================] - 0s
    22ms/step
239 1/1 [==============================] - 0s
    19ms/step
240 1/1 [==============================] - 0s
    16ms/step
241 1/1 [==============================] - 0s
    22ms/step
242 1/1 [==============================] - 0s
    17ms/step
243 1/1 [==============================] - 0s
    15ms/step
244 1/1 [==============================] - 0s
    15ms/step
245 1/1 [==============================] - 0s
    12ms/step
246 1/1 [==============================] - 0s
    16ms/step
247 1/1 [==============================] - 0s
    22ms/step
248 1/1 [==============================] - 0s
    56ms/step
249 1/1 [==============================] - 0s
    28ms/step
250 1/1 [==============================] - 0s
    23ms/step
251 1/1 [==============================] - 0s
    19ms/step
252 1/1 [==============================] - 0s
    18ms/step
253 1/1 [==============================] - 0s
    16ms/step
254 1/1 [==============================] - 0s
    17ms/step
```

```
255 1/1 [==============================] - 0s
    17ms/step
256 1/1 [==============================] - 0s
    15ms/step
257 1/1 [==============================] - 0s
    15ms/step
258 1/1 [==============================] - 0s
    18ms/step
259 1/1 [==============================] - 0s
    28ms/step
260 1/1 [==============================] - 0s
    64ms/step
261 1/1 [==============================] - 0s
    89ms/step
262 1/1 [==============================] - 0s
    53ms/step
263 1/1 [==============================] - 0s
    37ms/step
264 1/1 [==============================] - 0s
    35ms/step
265 1/1 [==============================] - 0s
    24ms/step
266 1/1 [==============================] - 0s
    22ms/step
267 1/1 [==============================] - 0s
    18ms/step
268 1/1 [==============================] - 0s
    17ms/step
269 1/1 [==============================] - 0s
    16ms/step
270 1/1 [==============================] - 0s
    16ms/step
271 1/1 [==============================] - 0s
    16ms/step
272 1/1 [==============================] - 0s
```

```
272 14ms/step
273 3/3 [==============================] - 0s
    5ms/step
274 1/1 [==============================] - 0s
    22ms/step
275 1/1 [==============================] - 0s
    72ms/step
276 1/1 [==============================] - 0s
    26ms/step
277 1/1 [==============================] - 0s
    22ms/step
278 1/1 [==============================] - 0s
    19ms/step
279 1/1 [==============================] - 0s
    17ms/step
280 1/1 [==============================] - 0s
    16ms/step
281 1/1 [==============================] - 0s
    15ms/step
282 1/1 [==============================] - 0s
    19ms/step
283 1/1 [==============================] - 0s
    15ms/step
284 1/1 [==============================] - 0s
    15ms/step
285 1/1 [==============================] - 0s
    17ms/step
286 1/1 [==============================] - 0s
    22ms/step
287 1/1 [==============================] - 0s
    59ms/step
288 1/1 [==============================] - 0s
    25ms/step
289 1/1 [==============================] - 0s
    22ms/step
```

```
290 1/1 [==============================] - 0s
    22ms/step
291 1/1 [==============================] - 0s
    19ms/step
292 1/1 [==============================] - 0s
    17ms/step
293 1/1 [==============================] - 0s
    16ms/step
294 1/1 [==============================] - 0s
    14ms/step
295 1/1 [==============================] - 0s
    20ms/step
296 1/1 [==============================] - 0s
    17ms/step
297 1/1 [==============================] - 0s
    18ms/step
298 1/1 [==============================] - 0s
    17ms/step
299 1/1 [==============================] - 0s
    61ms/step
300 1/1 [==============================] - 0s
    22ms/step
301 1/1 [==============================] - 0s
    21ms/step
302 1/1 [==============================] - 0s
    19ms/step
303 1/1 [==============================] - 0s
    17ms/step
304 1/1 [==============================] - 0s
    20ms/step
305 1/1 [==============================] - 0s
    17ms/step
306 1/1 [==============================] - 0s
    15ms/step
307 1/1 [==============================] - 0s
```

```
307 14ms/step
308 1/1 [==============================] - 0s
    12ms/step
309 1/1 [==============================] - 0s
    17ms/step
310 1/1 [==============================] - 0s
    22ms/step
311 1/1 [==============================] - 0s
    58ms/step
312 1/1 [==============================] - 0s
    25ms/step
313 1/1 [==============================] - 0s
    25ms/step
314 1/1 [==============================] - 0s
    18ms/step
315 1/1 [==============================] - 0s
    16ms/step
316 1/1 [==============================] - 0s
    16ms/step
317 1/1 [==============================] - 0s
    15ms/step
318 1/1 [==============================] - 0s
    16ms/step
319 1/1 [==============================] - 0s
    17ms/step
320 1/1 [==============================] - 0s
    15ms/step
321 1/1 [==============================] - 0s
    18ms/step
322 1/1 [==============================] - 0s
    18ms/step
323 1/1 [==============================] - 0s
    59ms/step
324 1/1 [==============================] - 0s
    25ms/step
```

```
325 1/1 [==============================] - 0s
    22ms/step
326 1/1 [==============================] - 0s
    20ms/step
327 1/1 [==============================] - 0s
    20ms/step
328 1/1 [==============================] - 0s
    16ms/step
329 1/1 [==============================] - 0s
    17ms/step
330 1/1 [==============================] - 0s
    16ms/step
331 1/1 [==============================] - 0s
    16ms/step
332 1/1 [==============================] - 0s
    16ms/step
333 1/1 [==============================] - 0s
    20ms/step
334 1/1 [==============================] - 0s
    19ms/step
335 1/1 [==============================] - 0s
    53ms/step
336 1/1 [==============================] - 0s
    32ms/step
337 1/1 [==============================] - 0s
    22ms/step
338 1/1 [==============================] - 0s
    20ms/step
339 1/1 [==============================] - 0s
    17ms/step
340 1/1 [==============================] - 0s
    16ms/step
341 1/1 [==============================] - 0s
    18ms/step
342 1/1 [==============================] - 0s
```

```
342 17ms/step
343 1/1 [==============================] - 0s
    14ms/step
344 1/1 [==============================] - 0s
    16ms/step
345 1/1 [==============================] - 0s
    18ms/step
346 1/1 [==============================] - 0s
    21ms/step
347 1/1 [==============================] - 0s
    59ms/step
348 1/1 [==============================] - 0s
    24ms/step
349 1/1 [==============================] - 0s
    21ms/step
350 1/1 [==============================] - 0s
    24ms/step
351 1/1 [==============================] - 0s
    18ms/step
352 1/1 [==============================] - 0s
    16ms/step
353 1/1 [==============================] - 0s
    16ms/step
354 1/1 [==============================] - 0s
    15ms/step
355 1/1 [==============================] - 0s
    13ms/step
356 1/1 [==============================] - 0s
    19ms/step
357 1/1 [==============================] - 0s
    19ms/step
358 1/1 [==============================] - 0s
    17ms/step
359 1/1 [==============================] - 0s
    61ms/step
```

```
360 1/1 [==============================] - 0s
    30ms/step
361 1/1 [==============================] - 0s
    23ms/step
362 1/1 [==============================] - 0s
    20ms/step
363 1/1 [==============================] - 0s
    18ms/step
364 1/1 [==============================] - 0s
    17ms/step
365 1/1 [==============================] - 0s
    20ms/step
366 1/1 [==============================] - 0s
    15ms/step
367 1/1 [==============================] - 0s
    13ms/step
368 1/1 [==============================] - 0s
    14ms/step
369 1/1 [==============================] - 0s
    17ms/step
370 1/1 [==============================] - 0s
    26ms/step
371 1/1 [==============================] - 0s
    58ms/step
372 1/1 [==============================] - 0s
    25ms/step
373 1/1 [==============================] - 0s
    22ms/step
374 1/1 [==============================] - 0s
    21ms/step
375 1/1 [==============================] - 0s
    18ms/step
376 1/1 [==============================] - 0s
    16ms/step
377 1/1 [==============================] - 0s
```

```
377 16ms/step
378 1/1 [==============================] - 0s
    16ms/step
379 1/1 [==============================] - 0s
    15ms/step
380 1/1 [==============================] - 0s
    19ms/step
381 1/1 [==============================] - 0s
    21ms/step
382 1/1 [==============================] - 0s
    21ms/step
383 1/1 [==============================] - 0s
    58ms/step
384 1/1 [==============================] - 0s
    32ms/step
385 1/1 [==============================] - 0s
    23ms/step
386 1/1 [==============================] - 0s
    20ms/step
387 1/1 [==============================] - 0s
    17ms/step
388 1/1 [==============================] - 0s
    15ms/step
389 1/1 [==============================] - 0s
    19ms/step
390 1/1 [==============================] - 0s
    17ms/step
391 1/1 [==============================] - 0s
    17ms/step
392 1/1 [==============================] - 0s
    14ms/step
393 1/1 [==============================] - 0s
    16ms/step
394 1/1 [==============================] - 0s
    24ms/step
```

```
395 1/1 [==============================] - 0s
    53ms/step
396 1/1 [==============================] - 0s
    26ms/step
397 1/1 [==============================] - 0s
    23ms/step
398 1/1 [==============================] - 0s
    20ms/step
399 1/1 [==============================] - 0s
    18ms/step
400 1/1 [==============================] - 0s
    15ms/step
401 1/1 [==============================] - 0s
    16ms/step
402 1/1 [==============================] - 0s
    20ms/step
403 1/1 [==============================] - 0s
    16ms/step
404 1/1 [==============================] - 0s
    15ms/step
405 1/1 [==============================] - 0s
    17ms/step
406 1/1 [==============================] - 0s
    15ms/step
407 1/1 [==============================] - 0s
    65ms/step
408 1/1 [==============================] - 0s
    40ms/step
409 1/1 [==============================] - 0s
    29ms/step
410 1/1 [==============================] - 0s
    25ms/step
411 1/1 [==============================] - 0s
    23ms/step
412 1/1 [==============================] - 0s
```

```
412 19ms/step
413 1/1 [==============================] - 0s
    16ms/step
414 1/1 [==============================] - 0s
    14ms/step
415 1/1 [==============================] - 0s
    16ms/step
416 1/1 [==============================] - 0s
    21ms/step
417 1/1 [==============================] - 0s
    17ms/step
418 5/5 [==============================] - 0s
    5ms/step
419 1/1 [==============================] - 0s
    29ms/step
420 1/1 [==============================] - 0s
    67ms/step
421 1/1 [==============================] - 0s
    26ms/step
422 1/1 [==============================] - 0s
    23ms/step
423 1/1 [==============================] - 0s
    18ms/step
424 1/1 [==============================] - 0s
    17ms/step
425 1/1 [==============================] - 0s
    16ms/step
426 1/1 [==============================] - 0s
    15ms/step
427 1/1 [==============================] - 0s
    18ms/step
428 1/1 [==============================] - 0s
    19ms/step
429 1/1 [==============================] - 0s
    17ms/step
```

```
430 1/1 [==============================] - 0s
    19ms/step
431 1/1 [==============================] - 0s
    17ms/step
432 1/1 [==============================] - 0s
    66ms/step
433 1/1 [==============================] - 0s
    26ms/step
434 1/1 [==============================] - 0s
    22ms/step
435 1/1 [==============================] - 0s
    20ms/step
436 1/1 [==============================] - 0s
    18ms/step
437 1/1 [==============================] - 0s
    21ms/step
438 1/1 [==============================] - 0s
    16ms/step
439 1/1 [==============================] - 0s
    17ms/step
440 1/1 [==============================] - 0s
    15ms/step
441 1/1 [==============================] - 0s
    15ms/step
442 1/1 [==============================] - 0s
    17ms/step
443 1/1 [==============================] - 0s
    19ms/step
444 1/1 [==============================] - 0s
    56ms/step
445 1/1 [==============================] - 0s
    26ms/step
446 1/1 [==============================] - 0s
    23ms/step
447 1/1 [==============================] - 0s
```

```
447 19ms/step
448 1/1 [==============================] - 0s
    17ms/step
449 1/1 [==============================] - 0s
    16ms/step
450 1/1 [==============================] - 0s
    19ms/step
451 1/1 [==============================] - 0s
    14ms/step
452 1/1 [==============================] - 0s
    14ms/step
453 1/1 [==============================] - 0s
    14ms/step
454 1/1 [==============================] - 0s
    18ms/step
455 1/1 [==============================] - 0s
    21ms/step
456 1/1 [==============================] - 0s
    56ms/step
457 1/1 [==============================] - 0s
    25ms/step
458 1/1 [==============================] - 0s
    21ms/step
459 1/1 [==============================] - 0s
    23ms/step
460 1/1 [==============================] - 0s
    17ms/step
461 1/1 [==============================] - 0s
    14ms/step
462 1/1 [==============================] - 0s
    16ms/step
463 1/1 [==============================] - 0s
    15ms/step
464 1/1 [==============================] - 0s
    20ms/step
```

```
465 1/1 [==============================] - 0s
    14ms/step
466 1/1 [==============================] - 0s
    17ms/step
467 1/1 [==============================] - 0s
    18ms/step
468 1/1 [==============================] - 0s
    52ms/step
469 1/1 [==============================] - 0s
    26ms/step
470 1/1 [==============================] - 0s
    22ms/step
471 1/1 [==============================] - 0s
    18ms/step
472 1/1 [==============================] - 0s
    17ms/step
473 1/1 [==============================] - 0s
    23ms/step
474 1/1 [==============================] - 0s
    17ms/step
475 1/1 [==============================] - 0s
    16ms/step
476 1/1 [==============================] - 0s
    16ms/step
477 1/1 [==============================] - 0s
    17ms/step
478 1/1 [==============================] - 0s
    18ms/step
479 1/1 [==============================] - 0s
    21ms/step
480 1/1 [==============================] - 0s
    55ms/step
481 1/1 [==============================] - 0s
    25ms/step
482 1/1 [==============================] - 0s
```

```
482 22ms/step
483 1/1 [==============================] - 0s
    19ms/step
484 1/1 [==============================] - 0s
    16ms/step
485 1/1 [==============================] - 0s
    18ms/step
486 1/1 [==============================] - 0s
    17ms/step
487 1/1 [==============================] - 0s
    17ms/step
488 1/1 [==============================] - 0s
    16ms/step
489 1/1 [==============================] - 0s
    15ms/step
490 1/1 [==============================] - 0s
    15ms/step
491 1/1 [==============================] - 0s
    22ms/step
492 1/1 [==============================] - 0s
    54ms/step
493 1/1 [==============================] - 0s
    51ms/step
494 1/1 [==============================] - 0s
    36ms/step
495 1/1 [==============================] - 0s
    34ms/step
496 1/1 [==============================] - 0s
    24ms/step
497 1/1 [==============================] - 0s
    20ms/step
498 1/1 [==============================] - 0s
    25ms/step
499 1/1 [==============================] - 0s
    18ms/step
```

```
500 1/1 [==============================] - 0s
    15ms/step
501 1/1 [==============================] - 0s
    16ms/step
502 1/1 [==============================] - 0s
    16ms/step
503 1/1 [==============================] - 0s
    22ms/step
504 2/2 [==============================] - 0s
    6ms/step
505 1/1 [==============================] - 0s
    20ms/step
506 1/1 [==============================] - 0s
    65ms/step
507 1/1 [==============================] - 0s
    25ms/step
508 1/1 [==============================] - 0s
    22ms/step
509 1/1 [==============================] - 0s
    19ms/step
510 1/1 [==============================] - 0s
    18ms/step
511 1/1 [==============================] - 0s
    21ms/step
512 1/1 [==============================] - 0s
    17ms/step
513 1/1 [==============================] - 0s
    16ms/step
514 1/1 [==============================] - 0s
    18ms/step
515 1/1 [==============================] - 0s
    16ms/step
516 1/1 [==============================] - 0s
    18ms/step
517 1/1 [==============================] - 0s
```

```
517 19ms/step
518 1/1 [==============================] - 0s
    58ms/step
519 1/1 [==============================] - 0s
    29ms/step
520 1/1 [==============================] - 0s
    23ms/step
521 1/1 [==============================] - 0s
    19ms/step
522 1/1 [==============================] - 0s
    19ms/step
523 1/1 [==============================] - 0s
    18ms/step
524 1/1 [==============================] - 0s
    21ms/step
525 1/1 [==============================] - 0s
    17ms/step
526 1/1 [==============================] - 0s
    17ms/step
527 1/1 [==============================] - 0s
    17ms/step
528 1/1 [==============================] - 0s
    17ms/step
529 1/1 [==============================] - 0s
    23ms/step
530 1/1 [==============================] - 0s
    52ms/step
531 1/1 [==============================] - 0s
    24ms/step
532 1/1 [==============================] - 0s
    22ms/step
533 1/1 [==============================] - 0s
    23ms/step
534 1/1 [==============================] - 0s
    19ms/step
```

```
535 1/1 [==============================] - 0s
    17ms/step
536 1/1 [==============================] - 0s
    14ms/step
537 1/1 [==============================] - 0s
    16ms/step
538 1/1 [==============================] - 0s
    12ms/step
539 1/1 [==============================] - 0s
    21ms/step
540 1/1 [==============================] - 0s
    18ms/step
541 1/1 [==============================] - 0s
    21ms/step
542 1/1 [==============================] - 0s
    56ms/step
543 1/1 [==============================] - 0s
    28ms/step
544 1/1 [==============================] - 0s
    23ms/step
545 1/1 [==============================] - 0s
    20ms/step
546 1/1 [==============================] - 0s
    18ms/step
547 1/1 [==============================] - 0s
    17ms/step
548 1/1 [==============================] - 0s
    19ms/step
549 1/1 [==============================] - 0s
    16ms/step
550 1/1 [==============================] - 0s
    15ms/step
551 1/1 [==============================] - 0s
    17ms/step
552 1/1 [==============================] - 0s
```

```
552 17ms/step
553 1/1 [==============================] - 0s
    22ms/step
554 1/1 [==============================] - 0s
    58ms/step
555 1/1 [==============================] - 0s
    26ms/step
556 1/1 [==============================] - 0s
    24ms/step
557 1/1 [==============================] - 0s
    21ms/step
558 1/1 [==============================] - 0s
    17ms/step
559 1/1 [==============================] - 0s
    17ms/step
560 1/1 [==============================] - 0s
    16ms/step
561 1/1 [==============================] - 0s
    17ms/step
562 1/1 [==============================] - 0s
    16ms/step
563 1/1 [==============================] - 0s
    16ms/step
564 8/8 [==============================] - 0s
    7ms/step
565 1/1 [==============================] - 0s
    25ms/step
566 1/1 [==============================] - 0s
    58ms/step
567 1/1 [==============================] - 0s
    42ms/step
568 1/1 [==============================] - 0s
    31ms/step
569 1/1 [==============================] - 0s
    25ms/step
```

```
570 1/1 [==============================] - 0s
    21ms/step
571 1/1 [==============================] - 0s
    21ms/step
572 1/1 [==============================] - 0s
    19ms/step
573 1/1 [==============================] - 0s
    17ms/step
574 1/1 [==============================] - 0s
    14ms/step
575 1/1 [==============================] - 0s
    14ms/step
576 1/1 [==============================] - 0s
    20ms/step
577 1/1 [==============================] - 0s
    16ms/step
578 5/5 [==============================] - 0s
    4ms/step
579 1/1 [==============================] - 0s
    22ms/step
580 1/1 [==============================] - 0s
    61ms/step
581 1/1 [==============================] - 0s
    26ms/step
582 1/1 [==============================] - 0s
    22ms/step
583 1/1 [==============================] - 0s
    20ms/step
584 1/1 [==============================] - 0s
    18ms/step
585 1/1 [==============================] - 0s
    22ms/step
586 1/1 [==============================] - 0s
    18ms/step
587 1/1 [==============================] - 0s
```

```
587 17ms/step
588 1/1 [==============================] - 0s
    17ms/step
589 1/1 [==============================] - 0s
    16ms/step
590 1/1 [==============================] - 0s
    21ms/step
591 1/1 [==============================] - 0s
    20ms/step
592 1/1 [==============================] - 0s
    54ms/step
593 1/1 [==============================] - 0s
    25ms/step
594 1/1 [==============================] - 0s
    26ms/step
595 1/1 [==============================] - 0s
    20ms/step
596 1/1 [==============================] - 0s
    18ms/step
597 1/1 [==============================] - 0s
    17ms/step
598 1/1 [==============================] - 0s
    14ms/step
599 1/1 [==============================] - 0s
    19ms/step
600 1/1 [==============================] - 0s
    16ms/step
601 1/1 [==============================] - 0s
    15ms/step
602 1/1 [==============================] - 0s
    17ms/step
603 1/1 [==============================] - 0s
    17ms/step
604 1/1 [==============================] - 0s
    59ms/step
```

```
605 1/1 [==============================] - 0s
    25ms/step
606 1/1 [==============================] - 0s
    21ms/step
607 1/1 [==============================] - 0s
    19ms/step
608 1/1 [==============================] - 0s
    18ms/step
609 1/1 [==============================] - 0s
    19ms/step
610 1/1 [==============================] - 0s
    18ms/step
611 1/1 [==============================] - 0s
    17ms/step
612 1/1 [==============================] - 0s
    15ms/step
613 1/1 [==============================] - 0s
    13ms/step
614 1/1 [==============================] - 0s
    24ms/step
615 1/1 [==============================] - 0s
    17ms/step
616 1/1 [==============================] - 0s
    56ms/step
617 1/1 [==============================] - 0s
    26ms/step
618 1/1 [==============================] - 0s
    26ms/step
619 1/1 [==============================] - 0s
    20ms/step
620 1/1 [==============================] - 0s
    17ms/step
621 1/1 [==============================] - 0s
    17ms/step
622 1/1 [==============================] - 0s
```

```
622 16ms/step
623 1/1 [==============================] - 0s
    20ms/step
624 1/1 [==============================] - 0s
    15ms/step
625 1/1 [==============================] - 0s
    17ms/step
626 1/1 [==============================] - 0s
    18ms/step
627 1/1 [==============================] - 0s
    17ms/step
628 1/1 [==============================] - 0s
    68ms/step
629 1/1 [==============================] - 0s
    27ms/step
630 1/1 [==============================] - 0s
    23ms/step
631 1/1 [==============================] - 0s
    19ms/step
632 1/1 [==============================] - 0s
    16ms/step
633 1/1 [==============================] - 0s
    20ms/step
634 1/1 [==============================] - 0s
    16ms/step
635 1/1 [==============================] - 0s
    16ms/step
636 1/1 [==============================] - 0s
    16ms/step
637 1/1 [==============================] - 0s
    15ms/step
638 1/1 [==============================] - 0s
    20ms/step
639 1/1 [==============================] - 0s
    19ms/step
```

```
640 1/1 [==============================] - 0s
    58ms/step
641 1/1 [==============================] - 0s
    25ms/step
642 1/1 [==============================] - 0s
    25ms/step
643 1/1 [==============================] - 0s
    20ms/step
644 1/1 [==============================] - 0s
    16ms/step
645 1/1 [==============================] - 0s
    16ms/step
646 1/1 [==============================] - 0s
    17ms/step
647 1/1 [==============================] - 0s
    18ms/step
648 1/1 [==============================] - 0s
    17ms/step
649 1/1 [==============================] - 0s
    16ms/step
650 1/1 [==============================] - 0s
    17ms/step
651 1/1 [==============================] - 0s
    16ms/step
652 1/1 [==============================] - 0s
    60ms/step
653 1/1 [==============================] - 0s
    25ms/step
654 1/1 [==============================] - 0s
    21ms/step
655 1/1 [==============================] - 0s
    18ms/step
656 1/1 [==============================] - 0s
    16ms/step
657 1/1 [==============================] - 0s
```

```
657 19ms/step
658 1/1 [==============================] - 0s
    18ms/step
659 1/1 [==============================] - 0s
    16ms/step
660 1/1 [==============================] - 0s
    15ms/step
661 1/1 [==============================] - 0s
    15ms/step
662 1/1 [==============================] - 0s
    21ms/step
663 1/1 [==============================] - 0s
    17ms/step
664 1/1 [==============================] - 0s
    52ms/step
665 1/1 [==============================] - 0s
    25ms/step
666 1/1 [==============================] - 0s
    27ms/step
667 1/1 [==============================] - 0s
    19ms/step
668 1/1 [==============================] - 0s
    17ms/step
669 1/1 [==============================] - 0s
    15ms/step
670 1/1 [==============================] - 0s
    14ms/step
671 1/1 [==============================] - 0s
    20ms/step
672 1/1 [==============================] - 0s
    17ms/step
673 1/1 [==============================] - 0s
    16ms/step
674 1/1 [==============================] - 0s
    17ms/step
```

```
675 1/1 [==============================] - 0s
    17ms/step
676 1/1 [==============================] - 0s
    60ms/step
677 1/1 [==============================] - 0s
    27ms/step
678 1/1 [==============================] - 0s
    20ms/step
679 1/1 [==============================] - 0s
    19ms/step
680 1/1 [==============================] - 0s
    17ms/step
681 1/1 [==============================] - 0s
    19ms/step
682 1/1 [==============================] - 0s
    17ms/step
683 1/1 [==============================] - 0s
    16ms/step
684 1/1 [==============================] - 0s
    14ms/step
685 1/1 [==============================] - 0s
    15ms/step
686 1/1 [==============================] - 0s
    20ms/step
687 1/1 [==============================] - 0s
    18ms/step
688 1/1 [==============================] - 0s
    54ms/step
689 1/1 [==============================] - 0s
    29ms/step
690 1/1 [==============================] - 0s
    26ms/step
691 1/1 [==============================] - 0s
    19ms/step
692 1/1 [==============================] - 0s
```

```
692 19ms/step
693 1/1 [==============================] - 0s
    17ms/step
694 1/1 [==============================] - 0s
    17ms/step
695 1/1 [==============================] - 0s
    17ms/step
696 1/1 [==============================] - 0s
    18ms/step
697 1/1 [==============================] - 0s
    16ms/step
698 1/1 [==============================] - 0s
    17ms/step
699 1/1 [==============================] - 0s
    19ms/step
700 1/1 [==============================] - 0s
    54ms/step
701 1/1 [==============================] - 0s
    69ms/step
702 1/1 [==============================] - 0s
    50ms/step
703 1/1 [==============================] - 0s
    32ms/step
704 1/1 [==============================] - 0s
    31ms/step
705 1/1 [==============================] - 0s
    23ms/step
706 1/1 [==============================] - 0s
    20ms/step
707 1/1 [==============================] - 0s
    19ms/step
708 1/1 [==============================] - 0s
    21ms/step
709 1/1 [==============================] - 0s
    20ms/step
```

```
710 1/1 [==============================] - 0s
    16ms/step
711 1/1 [==============================] - 0s
    19ms/step
712 1/1 [==============================] - 0s
    23ms/step
713 8/8 [==============================] - 0s
    7ms/step
714 1/1 [==============================] - 0s
    34ms/step
715 1/1 [==============================] - 0s
    65ms/step
716 1/1 [==============================] - 0s
    59ms/step
717 1/1 [==============================] - 0s
    39ms/step
718 1/1 [==============================] - 0s
    36ms/step
719 1/1 [==============================] - 0s
    30ms/step
720 1/1 [==============================] - 0s
    24ms/step
721 1/1 [==============================] - 0s
    19ms/step
722 1/1 [==============================] - 0s
    17ms/step
723 1/1 [==============================] - 0s
    18ms/step
724 1/1 [==============================] - 0s
    17ms/step
725 1/1 [==============================] - 0s
    16ms/step
726 1/1 [==============================] - 0s
    14ms/step
727 5/5 [==============================] - 0s
```

```
727 6ms/step
728 1/1 [==============================] - 0s
    24ms/step
729 1/1 [==============================] - 0s
    70ms/step
730 1/1 [==============================] - 0s
    27ms/step
731 1/1 [==============================] - 0s
    22ms/step
732 1/1 [==============================] - 0s
    20ms/step
733 1/1 [==============================] - 0s
    16ms/step
734 1/1 [==============================] - 0s
    17ms/step
735 1/1 [==============================] - 0s
    18ms/step
736 1/1 [==============================] - 0s
    18ms/step
737 1/1 [==============================] - 0s
    15ms/step
738 1/1 [==============================] - 0s
    15ms/step
739 1/1 [==============================] - 0s
    17ms/step
740 1/1 [==============================] - 0s
    21ms/step
741 1/1 [==============================] - 0s
    61ms/step
742 1/1 [==============================] - 0s
    28ms/step
743 1/1 [==============================] - 0s
    23ms/step
744 1/1 [==============================] - 0s
    22ms/step
```

```
745 1/1 [==============================] - 0s
    18ms/step
746 1/1 [==============================] - 0s
    17ms/step
747 1/1 [==============================] - 0s
    21ms/step
748 1/1 [==============================] - 0s
    24ms/step
749 1/1 [==============================] - 0s
    18ms/step
750 1/1 [==============================] - 0s
    18ms/step
751 1/1 [==============================] - 0s
    19ms/step
752 1/1 [==============================] - 0s
    19ms/step
753 1/1 [==============================] - 0s
    76ms/step
754 1/1 [==============================] - 0s
    27ms/step
755 1/1 [==============================] - 0s
    24ms/step
756 1/1 [==============================] - 0s
    21ms/step
757 1/1 [==============================] - 0s
    19ms/step
758 1/1 [==============================] - 0s
    18ms/step
759 1/1 [==============================] - 0s
    19ms/step
760 1/1 [==============================] - 0s
    18ms/step
761 1/1 [==============================] - 0s
    15ms/step
762 1/1 [==============================] - 0s
```

```
762 16ms/step
763 1/1 [==============================] - 0s
    20ms/step
764 1/1 [==============================] - 0s
    21ms/step
765 1/1 [==============================] - 0s
    66ms/step
766 1/1 [==============================] - 0s
    27ms/step
767 1/1 [==============================] - 0s
    23ms/step
768 1/1 [==============================] - 0s
    21ms/step
769 1/1 [==============================] - 0s
    19ms/step
770 1/1 [==============================] - 0s
    21ms/step
771 1/1 [==============================] - 0s
    18ms/step
772 1/1 [==============================] - 0s
    17ms/step
773 1/1 [==============================] - 0s
    14ms/step
774 1/1 [==============================] - 0s
    15ms/step
775 1/1 [==============================] - 0s
    22ms/step
776 1/1 [==============================] - 0s
    23ms/step
777 1/1 [==============================] - 0s
    69ms/step
778 1/1 [==============================] - 0s
    32ms/step
779 1/1 [==============================] - 0s
    22ms/step
```

```
780 1/1 [==============================] - 0s
    20ms/step
781 1/1 [==============================] - 0s
    19ms/step
782 1/1 [==============================] - 0s
    17ms/step
783 1/1 [==============================] - 0s
    24ms/step
784 1/1 [==============================] - 0s
    18ms/step
785 1/1 [==============================] - 0s
    14ms/step
786 1/1 [==============================] - 0s
    16ms/step
787 1/1 [==============================] - 0s
    18ms/step
788 1/1 [==============================] - 0s
    27ms/step
789 1/1 [==============================] - 0s
    59ms/step
790 1/1 [==============================] - 0s
    26ms/step
791 1/1 [==============================] - 0s
    23ms/step
792 1/1 [==============================] - 0s
    22ms/step
793 1/1 [==============================] - 0s
    18ms/step
794 1/1 [==============================] - 0s
    19ms/step
795 1/1 [==============================] - 0s
    16ms/step
796 1/1 [==============================] - 0s
    16ms/step
797 1/1 [==============================] - 0s
```

```
797 16ms/step
798 1/1 [==============================] - 0s
    17ms/step
799 1/1 [==============================] - 0s
    20ms/step
800 1/1 [==============================] - 0s
    16ms/step
801 1/1 [==============================] - 0s
    59ms/step
802 1/1 [==============================] - 0s
    26ms/step
803 1/1 [==============================] - 0s
    23ms/step
804 1/1 [==============================] - 0s
    20ms/step
805 1/1 [==============================] - 0s
    18ms/step
806 1/1 [==============================] - 0s
    17ms/step
807 1/1 [==============================] - 0s
    17ms/step
808 1/1 [==============================] - 0s
    17ms/step
809 1/1 [==============================] - 0s
    16ms/step
810 1/1 [==============================] - 0s
    19ms/step
811 1/1 [==============================] - 0s
    21ms/step
812 1/1 [==============================] - 0s
    17ms/step
813 1/1 [==============================] - 0s
    55ms/step
814 1/1 [==============================] - 0s
    25ms/step
```

```
815 1/1 [==============================] - 0s
    20ms/step
816 1/1 [==============================] - 0s
    20ms/step
817 1/1 [==============================] - 0s
    18ms/step
818 1/1 [==============================] - 0s
    19ms/step
819 1/1 [==============================] - 0s
    16ms/step
820 1/1 [==============================] - 0s
    14ms/step
821 1/1 [==============================] - 0s
    16ms/step
822 1/1 [==============================] - 0s
    15ms/step
823 1/1 [==============================] - 0s
    24ms/step
824 1/1 [==============================] - 0s
    20ms/step
825 1/1 [==============================] - 0s
    58ms/step
826 1/1 [==============================] - 0s
    26ms/step
827 1/1 [==============================] - 0s
    23ms/step
828 1/1 [==============================] - 0s
    19ms/step
829 1/1 [==============================] - 0s
    16ms/step
830 1/1 [==============================] - 0s
    17ms/step
831 1/1 [==============================] - 0s
    20ms/step
832 1/1 [==============================] - 0s
```

```
832 17ms/step
833 1/1 [==============================] - 0s
    18ms/step
834 1/1 [==============================] - 0s
    15ms/step
835 1/1 [==============================] - 0s
    21ms/step
836 1/1 [==============================] - 0s
    21ms/step
837 1/1 [==============================] - 0s
    60ms/step
838 1/1 [==============================] - 0s
    26ms/step
839 1/1 [==============================] - 0s
    23ms/step
840 1/1 [==============================] - 0s
    21ms/step
841 1/1 [==============================] - 0s
    17ms/step
842 1/1 [==============================] - 0s
    17ms/step
843 1/1 [==============================] - 0s
    14ms/step
844 1/1 [==============================] - 0s
    19ms/step
845 1/1 [==============================] - 0s
    16ms/step
846 1/1 [==============================] - 0s
    14ms/step
847 1/1 [==============================] - 0s
    19ms/step
848 1/1 [==============================] - 0s
    20ms/step
849 1/1 [==============================] - 0s
    68ms/step
```

```
850 1/1 [==============================] - 0s
    56ms/step
851 1/1 [==============================] - 0s
    39ms/step
852 1/1 [==============================] - 0s
    32ms/step
853 1/1 [==============================] - 0s
    26ms/step
854 1/1 [==============================] - 0s
    21ms/step
855 1/1 [==============================] - 0s
    22ms/step
856 1/1 [==============================] - 0s
    20ms/step
857 1/1 [==============================] - 0s
    18ms/step
858 1/1 [==============================] - 0s
    17ms/step
859 1/1 [==============================] - 0s
    17ms/step
860 1/1 [==============================] - 0s
    15ms/step
861 4/4 [==============================] - 0s
    5ms/step
862 1/1 [==============================] - 0s
    27ms/step
863 1/1 [==============================] - 0s
    58ms/step
864 1/1 [==============================] - 0s
    56ms/step
865 1/1 [==============================] - 0s
    38ms/step
866 1/1 [==============================] - 0s
    31ms/step
867 1/1 [==============================] - 0s
```

```
867 26ms/step
868 1/1 [==============================] - 0s
    25ms/step
869 1/1 [==============================] - 0s
    19ms/step
870 1/1 [==============================] - 0s
    17ms/step
871 1/1 [==============================] - 0s
    16ms/step
872 1/1 [==============================] - 0s
    17ms/step
873 1/1 [==============================] - 0s
    19ms/step
874 1/1 [==============================] - 0s
    16ms/step
875 4/4 [==============================] - 0s
    5ms/step
876 1/1 [==============================] - 0s
    24ms/step
877 1/1 [==============================] - 0s
    64ms/step
878 1/1 [==============================] - 0s
    28ms/step
879 1/1 [==============================] - 0s
    23ms/step
880 1/1 [==============================] - 0s
    17ms/step
881 1/1 [==============================] - 0s
    16ms/step
882 1/1 [==============================] - 0s
    20ms/step
883 1/1 [==============================] - 0s
    16ms/step
884 1/1 [==============================] - 0s
    19ms/step
```

```
885 1/1 [==============================] - 0s
    15ms/step
886 1/1 [==============================] - 0s
    13ms/step
887 1/1 [==============================] - 0s
    20ms/step
888 1/1 [==============================] - 0s
    19ms/step
889 1/1 [==============================] - 0s
    57ms/step
890 1/1 [==============================] - 0s
    24ms/step
891 1/1 [==============================] - 0s
    23ms/step
892 1/1 [==============================] - 0s
    19ms/step
893 1/1 [==============================] - 0s
    18ms/step
894 1/1 [==============================] - 0s
    17ms/step
895 1/1 [==============================] - 0s
    21ms/step
896 1/1 [==============================] - 0s
    17ms/step
897 1/1 [==============================] - 0s
    18ms/step
898 1/1 [==============================] - 0s
    14ms/step
899 1/1 [==============================] - 0s
    19ms/step
900 1/1 [==============================] - 0s
    19ms/step
901 1/1 [==============================] - 0s
    56ms/step
902 Epoch 1/100: Accuracy = 100.00%
```

```
903 Epoch 2/100: Accuracy = 100.00%
904 Epoch 3/100: Accuracy = 100.00%
905 Epoch 4/100: Accuracy = 100.00%
906 Epoch 5/100: Accuracy = 100.00%
907 Epoch 6/100: Accuracy = 100.00%
908 Epoch 7/100: Accuracy = 100.00%
909 Epoch 8/100: Accuracy = 100.00%
910 Epoch 9/100: Accuracy = 100.00%
911 Epoch 10/100: Accuracy = 100.00%
912 Epoch 11/100: Accuracy = 100.00%
913 Epoch 12/100: Accuracy = 100.00%
914 Epoch 13/100: Accuracy = 100.00%
915 Epoch 14/100: Accuracy = 100.00%
916 Epoch 15/100: Accuracy = 100.00%
917 Epoch 16/100: Accuracy = 100.00%
918 Epoch 17/100: Accuracy = 100.00%
919 Epoch 18/100: Accuracy = 100.00%
920 Epoch 19/100: Accuracy = 100.00%
921 Epoch 20/100: Accuracy = 100.00%
922 Epoch 21/100: Accuracy = 100.00%
923 Epoch 22/100: Accuracy = 100.00%
924 Epoch 23/100: Accuracy = 100.00%
925 Epoch 24/100: Accuracy = 100.00%
926 Epoch 25/100: Accuracy = 100.00%
927 Epoch 26/100: Accuracy = 100.00%
928 Epoch 27/100: Accuracy = 100.00%
929 Epoch 28/100: Accuracy = 100.00%
930 Epoch 29/100: Accuracy = 100.00%
931 Epoch 30/100: Accuracy = 100.00%
932 Epoch 31/100: Accuracy = 100.00%
933 Epoch 32/100: Accuracy = 100.00%
934 Epoch 33/100: Accuracy = 100.00%
935 Epoch 34/100: Accuracy = 100.00%
936 Epoch 35/100: Accuracy = 100.00%
937 Epoch 36/100: Accuracy = 100.00%
```

```
938 Epoch 37/100: Accuracy = 100.00%
939 Epoch 38/100: Accuracy = 100.00%
940 Epoch 39/100: Accuracy = 100.00%
941 Epoch 40/100: Accuracy = 100.00%
942 Epoch 41/100: Accuracy = 100.00%
943 Epoch 42/100: Accuracy = 100.00%
944 Epoch 43/100: Accuracy = 100.00%
945 Epoch 44/100: Accuracy = 100.00%
946 Epoch 45/100: Accuracy = 100.00%
947 Epoch 46/100: Accuracy = 100.00%
948 Epoch 47/100: Accuracy = 100.00%
949 Epoch 48/100: Accuracy = 100.00%
950 Epoch 49/100: Accuracy = 100.00%
951 Epoch 50/100: Accuracy = 100.00%
952 Epoch 51/100: Accuracy = 100.00%
953 Epoch 52/100: Accuracy = 100.00%
954 Epoch 53/100: Accuracy = 100.00%
955 Epoch 54/100: Accuracy = 100.00%
956 Epoch 55/100: Accuracy = 100.00%
957 Epoch 56/100: Accuracy = 100.00%
958 Epoch 57/100: Accuracy = 100.00%
959 Epoch 58/100: Accuracy = 100.00%
960 Epoch 59/100: Accuracy = 100.00%
961 Epoch 60/100: Accuracy = 100.00%
962 Epoch 61/100: Accuracy = 100.00%
963 Epoch 62/100: Accuracy = 100.00%
964 Epoch 63/100: Accuracy = 100.00%
965 Epoch 64/100: Accuracy = 100.00%
966 Epoch 65/100: Accuracy = 100.00%
967 Epoch 66/100: Accuracy = 100.00%
968 Epoch 67/100: Accuracy = 100.00%
969 Epoch 68/100: Accuracy = 100.00%
970 Epoch 69/100: Accuracy = 100.00%
971 Epoch 70/100: Accuracy = 100.00%
972 Epoch 71/100: Accuracy = 100.00%
```

```
 973 Epoch 72/100: Accuracy = 100.00%
 974 Epoch 73/100: Accuracy = 100.00%
 975 Epoch 74/100: Accuracy = 100.00%
 976 Epoch 75/100: Accuracy = 100.00%
 977 Epoch 76/100: Accuracy = 100.00%
 978 Epoch 77/100: Accuracy = 100.00%
 979 Epoch 78/100: Accuracy = 100.00%
 980 Epoch 79/100: Accuracy = 100.00%
 981 Epoch 80/100: Accuracy = 100.00%
 982 Epoch 81/100: Accuracy = 100.00%
 983 Epoch 82/100: Accuracy = 100.00%
 984 Epoch 83/100: Accuracy = 100.00%
 985 Epoch 84/100: Accuracy = 100.00%
 986 Epoch 85/100: Accuracy = 100.00%
 987 Epoch 86/100: Accuracy = 100.00%
 988 Epoch 87/100: Accuracy = 100.00%
 989 Epoch 88/100: Accuracy = 100.00%
 990 Epoch 89/100: Accuracy = 100.00%
 991 Epoch 90/100: Accuracy = 100.00%
 992 Epoch 91/100: Accuracy = 100.00%
 993 Epoch 92/100: Accuracy = 100.00%
 994 Epoch 93/100: Accuracy = 100.00%
 995 Epoch 94/100: Accuracy = 100.00%
 996 Epoch 95/100: Accuracy = 100.00%
 997 Epoch 96/100: Accuracy = 100.00%
 998 Epoch 97/100: Accuracy = 100.00%
 999 Epoch 98/100: Accuracy = 100.00%
1000 Epoch 99/100: Accuracy = 100.00%
1001 Epoch 100/100: Accuracy = 100.00%
1002
1003 Process finished with exit code 0
1004
```