WEEK -2

LOB LOGBOOK

NAME - LIKHITHA MAHADEVA

SID NUMBER - 2458682

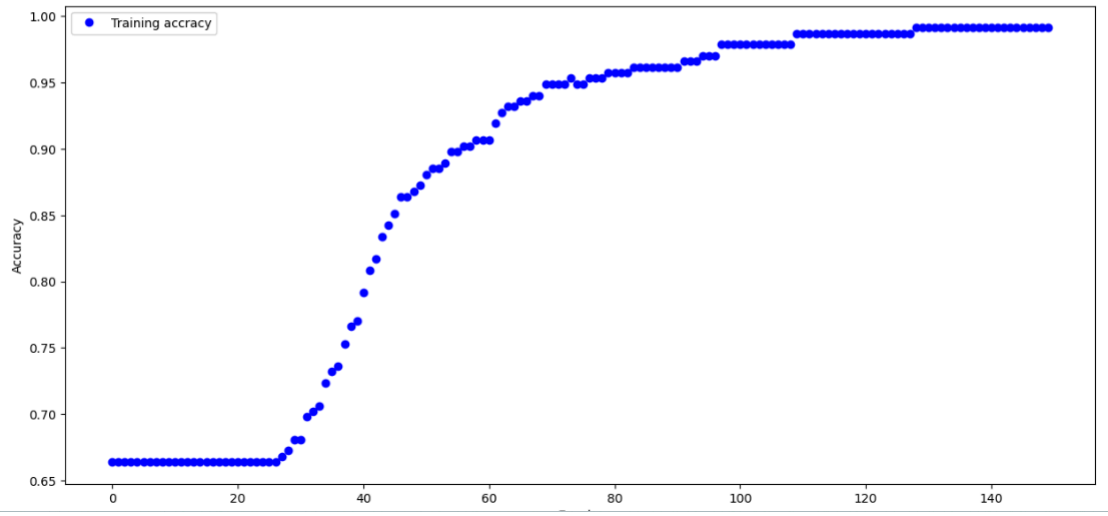
ASSIGNMENT - WEEK 1

Accuracy :0.845

Code :

[27]:
```
import matplotlib.pyplot as plt

history_dict=history.history
Accuracy=history_dict['accuracy']
plt.figure(num=1,figsize=(15,7))
plt.plot(Accuracy,'bo',label='Training accracy')
plt.xlabel('Epochs')
plt.ylabel('Accuracy')
plt.legend()
plt.show()
```



Sum:

$w_1, w_2, w_3, w_4, w_5, w_6, w_7, w_8 = 0.2$

$w_9 = w_{10} = w_{11} = w_{12} = 0.1$

$w_{13} = w_{14} = w_{15} = w_{16} = 0.3$.

New var:

$y = \frac{SSID}{8964879}$

$z = b + \sum_{i=1}^{m} w_i x_i$ (↑ inputs)

$b = 0$.

⑤ $z_1 = z_2 = 0.2(x_1 + x_2 + x_3 + x_4)$

$= 0.2 \cdot y(23 + 32 + 56 + 48)$

$= 0.2 \cdot 159 \cdot y = 31.8 \cdot y$

④ $y > 0 \Rightarrow h_1 = h_2 = \text{ReLu}\begin{pmatrix} z_1 \\ z_2 \end{pmatrix} = 31.8 \cdot y$.

⑤ $z_3 = z_4 = 0.1(h_1 + h_2) = 0.1 \cdot 2 \cdot 31.8 \cdot y = 6.36 \cdot y$

⑥ $y > 0 \Rightarrow h_3 = h_4 = \text{ReLu}\begin{pmatrix} z_3 \\ z_4 \end{pmatrix} = 6.36 \cdot y$

⑦ $0.3(h_3 + h_4) = 0.3 \cdot 2 \cdot 6.36 \cdot y = 3.816 \cdot y$

⑧ $z_5 = z_6 = 3.816 \cdot y + 0.5$

⑨ $o_1 = o_2 = \mathcal{S}\begin{pmatrix} z_5 \\ z_6 \end{pmatrix} = \mathcal{S}(3.816 \cdot y + 0.5)$

$= \mathcal{S}\left(3,816 \cdot \frac{SSID}{8964879} + 0.5\right)$

$SSID = 2373000$

$\Rightarrow o_1 = o_2 = \mathcal{S}\left(3.816 \cdot \frac{2373000}{8964879} + 0.5\right)$

$= \mathcal{S}(1.5100937)$

$\approx 0,819$