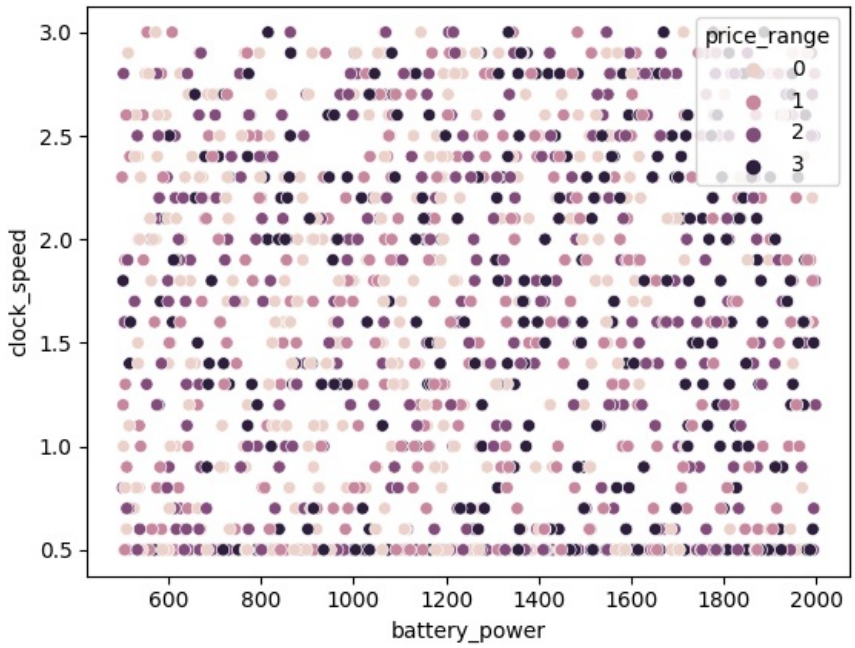
In [25]:
```
# Implementasi dengan Algoritma Naive Bayes (scikit-learn)
```

In [26]:
```
import numpy as nm
import matplotlib.pyplot as plt
import pandas as pd
dataset1 = pd.read_csv('data_train.csv')
dataset2 = pd.read_csv('data_validation.csv')
```

In [27]:
```
import seaborn as sns
sns.scatterplot(x=dataset1['battery_power'],y=dataset1['clock_speed'], hue=dataset1['price_range'])
```

Out[27]:
```
<Axes: xlabel='battery_power', ylabel='clock_speed'>
```



In [28]:
```
x_train = dataset1.iloc[:, :-1].values
x_test = dataset2.iloc[:, :-1].values
y_train = dataset1.iloc[:, -1].values
y_test = dataset2.iloc[:, -1].values
```

In [30]:
```
from sklearn.naive_bayes import GaussianNB
classifier = GaussianNB()
classifier.fit(x_train, y_train)
```

Out[30]:
```
▾ GaussianNB

GaussianNB()
```

In [31]:
```
y_pred = classifier.predict(x_test)
```

In [32]:
```
from sklearn.metrics import accuracy_score, classification_report, confusion_matrix, ConfusionMatrixDisplay
accuracy = accuracy_score(y_test, y_pred)
print(f"Accuracy: {accuracy}")
print()
print("Classification Report:")
print(classification_report(y_test, y_pred))
print()
print("Confusion Matrix:")
print(confusion_matrix(y_test, y_pred))
print()
cmd = ConfusionMatrixDisplay(confusion_matrix=confusion_matrix(y_test, y_pred), display_labels=classifier.classe
fig, ax = plt.subplots(figsize=(5, 5))
cmd.plot(ax=ax)
```

```
Accuracy: 0.7816666666666666

Classification Report:
              precision    recall  f1-score   support

           0       0.87      0.88      0.88       142
           1       0.66      0.65      0.65       144
           2       0.68      0.71      0.70       155
           3       0.90      0.89      0.90       159

    accuracy                           0.78       600
   macro avg       0.78      0.78      0.78       600
weighted avg       0.78      0.78      0.78       600


Confusion Matrix:
[[125  17   0   0]
 [ 18  93  33   0]
 [  0  30 110  15]
 [  0   0  18 141]]
```

Out[32]: <sklearn.metrics._plot.confusion_matrix.ConfusionMatrixDisplay at 0x201d67be950>