Practical 1.-a

Aim: To calculate evaluation using Sklearn library (Regression matrix).
a.) Mean Absolute Error.

Theory:

Mean Absolute Error:
The MAE measures the average magnitude of the errors in a set of forecasts, without considering their direction. It measures accuracy for continuous variables. The ~~equation~~ Mean Absolute Error (MAE) is the average of all absolute errors. Absolute error is the amount of error in your measurements.

The formula for Mean Absolute Error is:

$$MAE = \frac{1}{n} \sum_{i=1}^{n} |x_i - x|$$

where, n = the numbers of error
Σ = summation symbol
$|x_i - x|$ = the absolute errors.

Code :

```
from sklearn.metrics import mean_absolute_error
actual_values = [3, -0.5, 2, 7]
predicted_values = [2.5, 0.0, 2, 8]
print (mean_absolute_error (actual_values,
                            predicted_values ))
```

Output :

⇒ 0.5

Conclusion :

Hence, we have successfully performed the calculation of Mean Absolute Error (MAE) using the Scikit-learn library.