ALGORITHM :

1. START
2. Data Collection: Gather a dataset of facial images labeled with corresponding emotions. The dataset should cover a wide range of facial expressions and emotions.
3. Preprocessing: Preprocess the facial images to enhance the quality and reduce noise.
4. Feature Extraction: Extract relevant features from the preprocessed facial images.
5. Model Training: Use the extracted features and corresponding emotion labels to train a machine learning model.
6. Model Evaluation: Evaluate the trained model using a separate validation dataset to assess its performance in terms of accuracy, precision, recall, and F1 score.
7. Real-Time Emotion Detection: Once the model is trained and validated, it can be deployed to detect and recognize emotions in real-time.
8. Fine-tuning and Iteration: Evaluate the performance of the real-time emotion detection system and iterate on the algorithm by collecting more data, refining the preprocessing steps, modifying the feature extraction techniques, or training more sophisticated models to improve accuracy and robustness.
9. STOP.