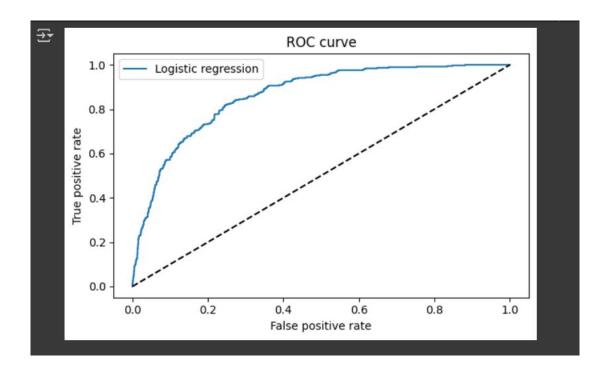


| Shape of the dataset: (7043, 21) | | | | | | | | | | | | | | | | | | | | | |
|----------------------------------|-------------------|------------|--------------|--------|--------------|------------------|-----------------|----------------|----------|------------------|-------------|-------------|---------------|------|----------------|------------------|--------------------------|----------------|--------------|-------|---|
| customerID ge | nder SeniorCitize | en Partner | r Dependents | tenure | PhoneService | MultipleLines | InternetService | OnlineSecurity | <i>,</i> | DeviceProtection | TechSupport | StreamingTV | StreamingMovi | ies | Contract | PaperlessBilling | PaymentMethod | MonthlyCharges | TotalCharges | Churn | |
| 0 7590-VHVEG Fe | male | 0 Yes | s No | | No | No phone service | DSL | . No | | . No | No | No | | No I | Month-to-month | Yes | Electronic check | 29.85 | 29.85 | No | 1 |
| 1 5575-GNVDE | Male | 0 No | o No | 34 | Yes | No | DSL | . Yes | s | . Yes | No | No | | No | One year | No | Mailed check | 56.95 | 1889.5 | No | |
| 2 3668-QPYBK | Male | 0 No | o No | | Yes | No | DSL | . Yes | 3 | . No | No | No | | No I | Month-to-month | Yes | Mailed check | 53.85 | 108.15 | Yes | |
| 3 7795-CFOCW | Male | 0 No | o No | 45 | No | No phone service | DSL | . Yes | s | . Yes | Yes | No | | No | One year | No B | ank transfer (automatic) | 42.30 | 1840.75 | i No | |
| 4 9237-HQITU Fe | male | 0 No | o No | | Yes | No | Fiber optic | : No | · | . No | No No | No | | No I | Month-to-month | Yes | Electronic check | 70.70 | 151.65 | Yes | |
| E | | | | | | | | | | | | | | | | | | | | | |

| | | | | | | | | | | | | |
|-----------------------------|------------------------|-----------|--------|----------|---------|--|--|--|--|--|--|--|
| <u> </u> | Classification Report: | | | | | | | | | | | |
| | CIGSSITICACION | | nosall | £1 | | | | | | | | |
| | | precision | recall | f1-score | support | | | | | | | |
| | | | | | | | | | | | | |
| | 0 | 0.86 | 0.90 | 0.88 | 1036 | | | | | | | |
| | 1 | 0.68 | 0.58 | 0.62 | 373 | | | | | | | |
| | | | | | | | | | | | | |
| | accuracy | | | 0.82 | 1409 | | | | | | | |
| | macro avg | 0.77 | 0.74 | 0.75 | 1409 | | | | | | | |
| | weighted avg | 0.81 | 0.82 | 0.81 | 1409 | | | | | | | |
| | | | | | | | | | | | | |
| | Confusion Matrix: | | | | | | | | | | | |
| | [[933 103] | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | [157 216]] | | | | | | | | | | | |
| Accuracy: 0.815471965933286 | | | | | | | | | | | | |
| ROC AUC: 0.861354508472471 | | | | | | | | | | | | |
| | | | | | | | | | | | | |



: ['Customer_Churn_Prediction_Model/scaler.pkl']