HIPER PARAMETROS OPTIMIZADOS

PROPHET

df	best_params
CHU_COPA_AJUST	{'changepoint_prior_scale': 0.1, 'seasonality_prior_scale': 0.01, 'daily_seasonality': True, 'yearly_seasonality': True, 'holidays_prior_scale': 0.01, 'seasonality_mode': 'additive', 'changepoint_range': 0.8}
CHU_REC_PROPIOS_AJUST	{'changepoint_prior_scale': 0.001, 'seasonality_prior_scale': 10.0, 'daily_seasonality': True, 'yearly_seasonality': True, 'holidays_prior_scale': 0.01, 'seasonality_mode': 'additive', 'changepoint_range': 0.9}
CHU_REGALIAS_AJUST	{'changepoint_prior_scale': 0.5, 'seasonality_prior_scale': 0.1, 'daily_seasonality': True, 'yearly_seasonality': False, 'holidays_prior_scale': 0.01, 'seasonality_mode': 'multiplicative', 'changepoint_range': 0.8}

PROPHET FOURIER ORDER

df	Fourier_yearly	Fourier_monthly
CHU_COPA_AJUST	{'fourier_order': 5, 'rmse': 2114568.5994672766}	{'fourier_order': 3, 'rmse': 1829278.0979960766}
CHU_REC_PROPIOS_AJUST	{'fourier_order': 10, 'rmse': 1241865.2497155124}	{'fourier_order': 3, 'rmse': 1160714.3127307887}
CHU_REGALIAS_AJUST	{'fourier_order': 3, 'rmse': 6054561.279307909}	{'fourier_order': 3, 'rmse': 5786977.886510033}

XGBOOST

df	best_params
CHU_COPA_AJUST	{'n_estimators': 453, 'learning_rate': 0.052251207169970344, 'max_depth': 3, 'min_child_weight': 2, 'subsample': 0.9052659212939362, 'colsample_bytree': 0.9700609066338445, 'gamma': 0.4972981188401708, 'reg_alpha': 0.49902287558195313, 'reg_lambda': 1.390212005740913}
CHU_REC_PROPIOS_AJUST	{'n_estimators': 370, 'learning_rate': 0.07063010235445233, 'max_depth': 7, 'min_child_weight': 4, 'subsample': 0.6846124207200684, 'colsample_bytree': 0.7520959246442501, 'gamma': 0.34727747835872463, 'reg_alpha': 0.10152547979284736, 'reg_lambda': 1.4618068656153174}
CHU_REGALIAS_AJUST	{'n_estimators': 500, 'learning_rate': 0.09909913615269426, 'max_depth': 7, 'min_child_weight': 2, 'subsample': 0.708172616764662, 'colsample_bytree': 0.9508794978508508, 'gamma': 0.49887376061225946, 'reg_alpha': 0.26891921056341245, 'reg_lambda': 0.5637625884315804}

LIGHTGBM

df	best_params
CHU_COPA_AJUST	{'n_estimators': 1670, 'learning_rate': 0.05434009138012196, 'max_depth': 9, 'num_leaves': 43, 'min_child_samples': 27, 'subsample': 0.9577724287559277, 'colsample_bytree': 0.8076995248364037, 'reg_alpha': 0.014464297652987318, 'reg_lambda': 0.6299036642292266}
CHU_REC_PROPIOS_AJUST	{'n_estimators': 1236, 'learning_rate': 0.048922724434304524, 'max_depth': 8, 'num_leaves': 79, 'min_child_samples': 33, 'subsample': 0.7343992892058865, 'colsample_bytree': 0.5125884353625726, 'reg_alpha': 0.09322166284457188, 'reg_lambda': 0.7334602723962557}
CHU_REGALIAS_AJUST	{'n_estimators': 1330, 'learning_rate': 0.09969430566201748, 'max_depth': 9, 'num_leaves': 42, 'min_child_samples': 10, 'subsample': 0.5086757934277606, 'colsample_bytree': 0.8651927912102433, 'reg_alpha': 0.40673825228466354, 'reg_lambda': 0.012809939668950783}