Marriage : divorced: 0.11517108668244454

Single: 0.2828957554577426

Married: 0.6019331578598128

Education : unknown: 0.04107407489327818

Primary: 0.15153391873659064

Secondary: 0.513193691800668

Tertiary: 0.29419831456946316 almost the natural distribution

Default : 0.018026586450200173

Housing : 0.5558381809736569 balanced

loan : 0.16022649355245405

only bank client information

class\_weight = default, c = 0.1

True Positives: 0

True Negatives: 23980

False Positives: 0

False Negatives: 3146

True Positive Rate: 0.0

True Negative Rate: 1.0

Balanced Error Rate: 0.5

True Positives: 0

True Negatives: 7972

False Positives: 0

False Negatives: 1070

True Positive Rate: 0.0

True Negative Rate: 1.0

Balanced Error Rate: 0.5

class\_weight = balanced, c = 0.1

True Positives: 2682

True Negatives: 13054

False Positives: 10926

False Negatives: 464

True Positive Rate: 0.852511125238

True Negative Rate: 0.54437030859

Balanced Error Rate: 0.301559283086

True Positives: 721

True Negatives: 3916

False Positives: 4056

False Negatives: 349

True Positive Rate: 0.673831775701

True Negative Rate: 0.491219267436

Balanced Error Rate: 0.417474478432

contact + other

class\_weight = 'no', c = 1

training:

True Positives: 2912

True Negatives: 21900

False Positives: 2080

False Negatives: 234

True Positive Rate: 0.925619834711

True Negative Rate: 0.913261050876

Balanced Error Rate: 0.0805595572068

validation:

True Positives: 432

True Negatives: 7089

False Positives: 883

False Negatives: 638

True Positive Rate: 0.403738317757

True Negative Rate: 0.889237330657

Balanced Error Rate: 0.353512175793

class\_weight = 'balanced', c = 0.1

training:

True Positives: 2682

True Negatives: 15708

False Positives: 8272

False Negatives: 464

True Positive Rate: 0.852511125238

True Negative Rate: 0.65504587156

Balanced Error Rate: 0.246221501601

validation:

True Positives: 866

True Negatives: 5177

False Positives: 2795

False Negatives: 204

True Positive Rate: 0.809345794393

True Negative Rate: 0.649397892624

Balanced Error Rate: 0.270628156492

class\_weight = {0:1, 1:10}, c = 0.1

training:

True Positives: 2777

True Negatives: 15650

False Positives: 8330

False Negatives: 369

True Positive Rate: 0.88270820089

True Negative Rate: 0.652627189324

Balanced Error Rate: 0.232332304893

validation:

True Positives: 881

True Negatives: 5138

False Positives: 2834

False Negatives: 189

True Positive Rate: 0.823364485981

True Negative Rate: 0.644505770196

Balanced Error Rate: 0.266064871912

class\_weight = {0:1, 1:5}, c = 0.1

True Positives: 2479

True Negatives: 17840

False Positives: 6140

False Negatives: 667

True Positive Rate: 0.78798474253

True Negative Rate: 0.743953294412

Balanced Error Rate: 0.234030981529

True Positives: 798

True Negatives: 5856

False Positives: 2116

False Negatives: 272

True Positive Rate: 0.745794392523

True Negative Rate: 0.734570998495

Balanced Error Rate: 0.259817304491

feat = [data['duration'], data['previous'], data['pdays'], data['campaign']] + encodeMonth(data['month']) + encodeOutcome(data['poutcome'])

C=0.1, class\_weight = {0:1, 1:6}

True Positives: 2407

True Negatives: 17689

False Positives: 6291

False Negatives: 739

True Positive Rate: 0.765098537826

True Negative Rate: 0.737656380317

Balanced Error Rate: 0.248622540929

True Positives: 801

True Negatives: 5872

False Positives: 2100

False Negatives: 269

True Positive Rate: 0.748598130841

True Negative Rate: 0.736578023081

Balanced Error Rate: 0.257411923039

Feat + age

C=0.1, class\_weight = {0:1, 1:5}

True Positives: 2591

True Negatives: 17520

False Positives: 6460

False Negatives: 555

True Positive Rate: 0.823585505404

True Negative Rate: 0.730608840701

Balanced Error Rate: 0.222902826948

True Positives: 824

True Negatives: 5767

False Positives: 2205

False Negatives: 246

True Positive Rate: 0.770093457944

True Negative Rate: 0.723406924235

Balanced Error Rate: 0.253249808911