Attribute Information:

- 1. age (numeric)
- 2. job: type of job (categorical:admin.','bluecollar','entrepreneur','housemaid','management','retir ed','selfemployed','services','student','technician','unemployed','unknown')
- 3. marital: marital status (categorical:'divorced','married','single','unknown'; note: 'divorced' means divorced or widowed)
- 4. education (categorical: 'basic.4y','basic.6y','basic.9y','high.school','illiterate','professional.course','univ ersity.degree','unknown')
- 5. default: has credit in default? (categorical: 'no','yes','unknown')
- 6. balance: average yearly balance, in euros (numeric)
- 7. housing: has housing loan? (categorical: 'no','yes','unknown')
- 8. loan: has personal loan? (categorical: 'no','yes','unknown')
- 9. contact: contact communication type (categorical: 'cellular', 'telephone')
- 10. day: last contact day of the month (numeric 1 31)
- 11. month: last contact month of year (categorical: 'jan', 'feb','mar', ..., 'nov', 'dec')
- 12. duration: last contact duration, in seconds (numeric).

 Important note: this attribute highly affects the output target (e.g., ifduration=0 then y='no'). Yet, the duration is not known before a call is performed. Also, after the end of the call y is obviously known. Thus, this input should only be included for benchmark purposes and should be discarded if the intention is to have a realistic predictive model.
- 13. campaign: number of contacts performed during this campaign and for this client (numeric, includes last contact)
- 14. pdays: number of days that passed by after the client was last contacted from a previous campaign (numeric; 999 means client was not previously contacted)
- 15. previous: number of contacts performed before this campaign and for this client (numeric)
- 16. poutcome: outcome of the previous marketing campaign(categorical: 'failure','nonexistent','success')
- 17. target: has the client subscribed a term deposit? (binary:"yes","no")