

## Attribute information For bank dataset

## Input variables:

# bank client data:

1 - age (numeric)

2 - job : type of job (categorical:

"admin.", "unknown", "unemployed", "management", "housemaid", "entrepreneur", "student",  
"blue-collar", "self-

employed", "retired", "technician", "services")

3 - marital : marital status (categorical: "married", "divorced", "single"; note: "divorced"  
means divorced or widowed)

4 - education (categorical: "unknown", "secondary", "primary", "tertiary")

5 - default: has credit in default? (binary: "yes", "no")

6 - balance: average yearly balance, in euros (numeric)

7 - housing: has housing loan? (binary: "yes", "no")

8 - loan: has personal loan? (binary: "yes", "no")

# related with the last contact of the current campaign:

9 - contact: contact communication type (categorical: "unknown", "telephone", "cellular")

10 - day: last contact day of the month (numeric)

11 - month: last contact month of year (categorical: "jan", "feb", "mar", ..., "nov", "dec")

12 - duration: last contact duration, in seconds (numeric)

# other attributes:

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, -1 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:  
"unknown", "other", "failure", "success")

## Output variable (desired target):

17 - y - has the client subscribed a term deposit? (binary: "yes", "no")

8. Missing Attribute Values: None