



UNIVERSIDAD POLITECNICA DE YUCATAN

UNIT 1

MACHINE LEARNING

TEACHER:

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by:

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DUE DATE:

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de ejecución Herramientas Ayuda Se guardaron todos los cambios

+ Código + Texto

0s

```
import cv2
import pandas as pd
print("Done")

df = pd.read_csv("/content/bank-full - copia.csv", sep=";")
df.head(10)
print(df.head(10))
print(df.describe())
```

Done

| | age | job | marital | education | default | balance | housing | loan | \ |
|---|-----|--------------|----------|-----------|---------|---------|---------|------|---|
| 0 | 58 | management | married | tertiary | no | 2143 | yes | no | |
| 1 | 44 | technician | single | secondary | no | 29 | yes | no | |
| 2 | 33 | entrepreneur | married | secondary | no | 2 | yes | yes | |
| 3 | 47 | blue-collar | married | unknown | no | 1506 | yes | no | |
| 4 | 33 | unknown | single | unknown | no | 1 | no | no | |
| 5 | 35 | management | married | tertiary | no | 231 | yes | no | |
| 6 | 28 | management | single | tertiary | no | 447 | yes | yes | |
| 7 | 42 | entrepreneur | divorced | tertiary | yes | 2 | yes | no | |
| 8 | 58 | retired | married | primary | no | 121 | yes | no | |
| 9 | 43 | technician | single | secondary | no | 593 | yes | no | |

+ Código + Texto

2s

```
contact day month duration campaign pdays previous poutcome y
0 unknown 5 may 261 1 -1 0 unknown no
1 unknown 5 may 151 1 -1 0 unknown no
2 unknown 5 may 76 1 -1 0 unknown no
3 unknown 5 may 92 1 -1 0 unknown no
4 unknown 5 may 198 1 -1 0 unknown no
5 unknown 5 may 139 1 -1 0 unknown no
6 unknown 5 may 217 1 -1 0 unknown no
7 unknown 5 may 380 1 -1 0 unknown no
8 unknown 5 may 50 1 -1 0 unknown no
9 unknown 5 may 55 1 -1 0 unknown no

age balance day duration campaign \
count 45211.000000 45211.000000 45211.000000 45211.000000 45211.000000
mean 40.936210 1362.272058 15.806419 258.163080 2.763841
std 10.618762 3044.765829 8.322476 257.527812 3.098021
min 18.000000 -8019.000000 1.000000 0.000000 1.000000
25% 33.000000 72.000000 8.000000 103.000000 1.000000
50% 39.000000 448.000000 16.000000 180.000000 2.000000
75% 48.000000 1428.000000 21.000000 319.000000 3.000000
max 95.000000 102127.000000 31.000000 4918.000000 63.000000

pdays previous
count 45211.000000 45211.000000
mean 40.197828 0.580323
std 100.128746 2.303441
min -1.000000 0.000000
25% -1.000000 0.000000
50% -1.000000 0.000000
75% -1.000000 0.000000
max 871.000000 275.000000
```