

TASK-3 (Build a Decision Tree Classifier)

OUTPUT:

```
Untitled55.ipynb
File Edit View Insert Runtime Tools Help All changes saved

+ Code + Text

age job marital education default housing loan contact \
0 56 housemaid married basic.4y no no no telephone
1 57 services married high.school unknown no no telephone
2 37 services married high.school no yes no telephone
3 40 admin. married basic.6y no no no telephone
4 56 services married high.school no no yes telephone

month day_of_week ... campaign pdays previous poutcome emp.var.rate \
0 may mon ... 1 999 0 nonexistent 1.1
1 may mon ... 1 999 0 nonexistent 1.1
2 may mon ... 1 999 0 nonexistent 1.1
3 may mon ... 1 999 0 nonexistent 1.1
4 may mon ... 1 999 0 nonexistent 1.1

cons.price.idx cons.conf.idx euribor3m nr.employed y
0 93.994 -36.4 4.857 5191.0 no
1 93.994 -36.4 4.857 5191.0 no
2 93.994 -36.4 4.857 5191.0 no
3 93.994 -36.4 4.857 5191.0 no
4 93.994 -36.4 4.857 5191.0 no

[5 rows x 21 columns]
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 41188 entries, 0 to 41187
Data columns (total 21 columns):
# Column Non-Null Count Dtype
2m 53s completed at 8:05 PM
```

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Untitled55.ipynb
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+ Code + Text

0 age 41188 non-null int64
1 job 41188 non-null object
2 marital 41188 non-null object
3 education 41188 non-null object
4 default 41188 non-null object
5 housing 41188 non-null object
6 loan 41188 non-null object
7 contact 41188 non-null object
8 month 41188 non-null object
9 day_of_week 41188 non-null object
10 duration 41188 non-null int64
11 campaign 41188 non-null int64
12 pdays 41188 non-null int64
13 previous 41188 non-null int64
14 poutcome 41188 non-null object
15 emp.var.rate 41188 non-null float64
16 cons.price.idx 41188 non-null float64
17 cons.conf.idx 41188 non-null float64
18 euribor3m 41188 non-null float64
19 nr.employed 41188 non-null float64
20 y 41188 non-null object
dtypes: float64(5), int64(5), object(11)
memory usage: 6.6+ MB
None
age 0
2m 53s completed at 8:05 PM
```



