

# Esempio 2 Modulo Dataset

May 4, 2022

## 1 Esempi di Utilizzo del MODULO DATASET della libreria IntelligenzaArtificiale

### 1.1 Installare la libreria

```
[ ]: #Per installare la libreria sul tuo computer puoi usare il comando :  
pip3 install intelligenzaartificiale
```

```
[ ]: #se invece utilizzi google colab puoi usare:  
!pip install intelligenzaartificiale
```

### 1.2 Importare il MODULO DATASET

```
[2]: from intelligenzaartificiale import dataset as dt
```

### 1.3 Caricare e lavorare oltre 750+ Dataset INCORPORATI

```
[4]: print(dt.lista_datasets())
```

	dataset_id	title
0	AirPassengers	Monthly Airline Passenger Numbers 1949-1960
1	BJsales	Sales Data with Leading Indicator
2	BOD	Biochemical Oxygen Demand
3	Formaldehyde	Determination of Formaldehyde
4	HairEyeColor	Hair and Eye Color of Statistics Students
..	...	...
752	VerbAgg	Verbal Aggression item responses
753	cake	Breakage Angle of Chocolate Cakes
754	cbpp	Contagious bovine pleuropneumonia
755	grouseticks	Data on red grouse ticks from Elston et al. 2001
756	sleepstudy	Reaction times in a sleep deprivation study

[757 rows x 2 columns]

```
[5]: print(dt.documentazione_dataset("VerbAgg"))
```

Two-dimensional, size-mutable, potentially heterogeneous tabular data.

Data structure also contains labeled axes (rows and columns).  
Arithmetic operations align on both row and column labels. Can be  
thought of as a dict-like container for Series objects. The primary  
pandas data structure.

#### Parameters

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`data` : ndarray (structured or homogeneous), Iterable, dict, or DataFrame  
Dict can contain Series, arrays, constants, or list-like objects.

.. versionchanged:: 0.23.0

If data is a dict, column order follows insertion-order for  
Python 3.6 and later.

.. versionchanged:: 0.25.0

If data is a list of dicts, column order follows insertion-order  
for Python 3.6 and later.

`index` : Index or array-like

Index to use for resulting frame. Will default to RangeIndex if  
no indexing information part of input data and no index provided.

`columns` : Index or array-like

Column labels to use for resulting frame. Will default to  
RangeIndex (0, 1, 2, ..., n) if no column labels are provided.

`dtype` : dtype, default None

Data type to force. Only a single dtype is allowed. If None, infer.

`copy` : bool, default False

Copy data from inputs. Only affects DataFrame / 2d ndarray input.

#### See Also

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`DataFrame.from_records` : Constructor from tuples, also record arrays.

`DataFrame.from_dict` : From dicts of Series, arrays, or dicts.

`read_csv` : Read a comma-separated values (csv) file into DataFrame.

`read_table` : Read general delimited file into DataFrame.

`read_clipboard` : Read text from clipboard into DataFrame.

#### Examples

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Constructing DataFrame from a dictionary.

```
>>> d = {'col1': [1, 2], 'col2': [3, 4]}
```

```
>>> df = pd.DataFrame(data=d)
```

```
>>> df
```

```
   col1  col2
```

```
0    1    3
1    2    4
```

Notice that the inferred dtype is int64.

```
>>> df.dtypes
col1    int64
col2    int64
dtype: object
```

To enforce a single dtype:

```
>>> df = pd.DataFrame(data=d, dtype=np.int8)
>>> df.dtypes
col1    int8
col2    int8
dtype: object
```

Constructing DataFrame from numpy ndarray:

```
>>> df2 = pd.DataFrame(np.array([[1, 2, 3], [4, 5, 6], [7, 8, 9]]),
...                      columns=['a', 'b', 'c'])
>>> df2
   a  b  c
0  1  2  3
1  4  5  6
2  7  8  9
```

None

```
[6]: #ritorna il dataframe del dataset richiesto
il_mio_dataset= dt.importa_dataset("VerbAgg")

print(il_mio_dataset)
```

	Anger	Gender	item	resp	id	btype	situ	mode	r2
1	20	M	S1WantCurse	no	1	curse	other	want	N
2	11	M	S1WantCurse	no	2	curse	other	want	N
3	17	F	S1WantCurse	perhaps	3	curse	other	want	Y
4	21	F	S1WantCurse	perhaps	4	curse	other	want	Y
5	17	F	S1WantCurse	perhaps	5	curse	other	want	Y
...	...	...	...	...	...	...	...	...	...
7580	17	M	S4DoShout	no	312	shout	self	do	N
7581	20	F	S4DoShout	no	313	shout	self	do	N
7582	25	F	S4DoShout	no	314	shout	self	do	N
7583	23	F	S4DoShout	no	315	shout	self	do	N
7584	12	F	S4DoShout	no	316	shout	self	do	N

[7584 rows x 9 columns]

## 1.4 Altre risorse

- [Documentazione Ufficiale](#)
- [Blog Ufficiale](#)
- [Corsi Gratis](#)
- [Ebook Gratis](#)
- [Progetti Python Open Source](#)
- [Dataset Pubblici](#)
- [Editor Python Online per il M.L.](#)

## 2 Per favore citaci se usi la Libreria.