

This notebook achieved a best score of .78.

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In [ ]: # This Python 3 environment comes with many helpful analytics libraries installed
# It is defined by the kaggle/python Docker image: https://github.com/kaggle
# For example, here's several helpful packages to load

import numpy as np # linear algebra
import pandas as pd # data processing, CSV file I/O (e.g. pd.read_csv)

# Input data files are available in the read-only "../input/" directory
# For example, running this (by clicking run or pressing Shift+Enter) will list all files in the input directory

import os
for dirname, _, filenames in os.walk('/kaggle/input'):
    for filename in filenames:
        print(os.path.join(dirname, filename))

# You can write up to 20GB to the current directory (/kaggle/working/) that
# You can also write temporary files to /kaggle/temp/, but they won't be saved
/kaggle/input/titanic/train.csv
/kaggle/input/titanic/test.csv
/kaggle/input/titanic/gender_submission.csv
```

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In [ ]: train_data = pd.read_csv("/kaggle/input/titanic/train.csv")
train_data.head()
```

```
Out[ ]:
```

	PassengerId	Survived	Pclass	Name	Sex	Age	SibSp	Parch	Ticket
0	1	0	3	Braund, Mr. Owen Harris	male	22.0	1	0	210151742
1	2	1	1	Cumings, Mrs. John Bradley (Florence Briggs Thayer)	female	38.0	1	0	PC 17599
2	3	1	3	Heikkinen, Miss. Laina	female	26.0	0	0	STON/O 3101282
3	4	1	1	Futrelle, Mrs. Jacques Heath (Lily May Peel)	female	35.0	1	0	113522
4	5	0	3	Allen, Mr. William Henry	male	35.0	0	0	373661

```
In [ ]: test_data = pd.read_csv("/kaggle/input/titanic/test.csv")
test_data.head()
```

Out[]:	PassengerId	Pclass	Name	Sex	Age	SibSp	Parch	Ticket	Fare
0	892	3	Kelly, Mr. James	male	34.5	0	0	330911	7.8295
1	893	3	Wilkes, Mrs. James (Ellen Needs)	female	47.0	1	0	363272	7.0000
2	894	2	Myles, Mr. Thomas Francis	male	62.0	0	0	240276	9.6875
3	895	3	Wirz, Mr. Albert	male	27.0	0	0	315154	8.6625
4	896	3	Hirvonen, Mrs. Alexander (Helga E Lindqvist)	female	22.0	1	1	3101298	12.2875

```
In [ ]: from sklearn.ensemble import RandomForestClassifier

y = train_data["Survived"]

features = ["Pclass", "Sex", "SibSp", "Parch"]
X = pd.get_dummies(train_data[features])
X_test = pd.get_dummies(test_data[features])

model = RandomForestClassifier(n_estimators=100, max_depth=5, random_state=1)
model.fit(X, y)
predictions = model.predict(X_test)

output = pd.DataFrame({'PassengerId': test_data.PassengerId, 'Survived': predictions})
output.to_csv('submission.csv', index=False)
print("Your submission was successfully saved!")
```

Your submission was successfully saved!

```
In [ ]: output
```

Out[]:

	PassengerId	Survived
0	892	0
1	893	1
2	894	0
3	895	0
4	896	1
...
413	1305	0
414	1306	1
415	1307	0
416	1308	0
417	1309	0

418 rows × 2 columns

In []: