

# Horse Racing Prediction User Manual

Run the script named “horse\_racing\_predicter\_demo.py” or ipython notebook named “Horse\_Racing\_Regression\_Predictions.ipynb”.

Note : It is not permitted to publish whole dataset, therefore, a part of the dataset is created, including all horse statistics of races between only 12/04/2021 and 18/04/2021 for demonstration. Date and city can be obtained from The Turkish Jockey Club website.

(<https://www.tjk.org/TR/YarisSever/Info/Page/GunlukYarisProgrami>)



For ipython :

```
#Required race date and city input
date = "15/04/2021"
city = "İzmir"
```

Change date and city to asked race inputs at the 6th cell (above) by keeping the current date format. Unless the date is not between 12-18/04/2021, it only considers jockeys statistics.

```
#Calling the function that makes predictions and plots results.
#Input = Race No
make_prediction_and_plot(1)
```

Then enter asked race number as input to function in 8th cell (above).

After running all cells, prediction table is plotted. To make predictions for other races, change race number input and run just 8th cell again. If another day or city is asked, running all cells is required to scrape new data.

RACE 1

	GradientBoostReg	KNNReg	LassoReg	RidgeReg	VotingReg
1	8650.73	8672.1	8893.29	8826.48	8760.65
2	8879.91	8813.5	9034.16	8983.74	8927.83
3	9135.68	9252.5	9239.85	9228.36	9214.1
4	9054.76	8923.7	8978.23	8987.1	8985.95
5	9076.4	9067.4	9096.01	9072.61	9078.1
6	9090.18	8784.8	9088.21	9164.18	9031.84
7	8717.12	8535.9	8742.39	8777.91	8693.33
8	9067.09	9208.2	9028.38	9070.01	9093.42
9	9124.14	9279.0	9104.41	9160.05	9166.9
10	9060.77	9538.3	8989.79	9011.58	9150.11

The table represents predicted total times of all horses. But it considers distance as categorical value, that means predicted times are not accurate for that race, just used for comparison.

Lower time values means better performance, which are green cells.

**For python script:**

```
Enter date (between 12-18/04/2021) :
Enter city :
```

It requires user input. Enter asked date and city. After it scrapes all required data, enter race number.

```
Enter race number :2
```

	GradientBoostReg	KNNReg	LassoReg	RidgeReg	VotingReg
1	14390.0	13428.5	14339.1	14341.82	14124.85
2	14239.18	13911.3	14107.91	14097.17	14088.89
3	14358.62	13049.2	14289.49	14291.87	13997.3
4	14270.83	14954.7	14352.0	14345.26	14480.7
5	13822.45	13362.2	14155.79	14148.89	13872.33
6	14635.55	14287.0	14499.17	14513.77	14483.87
7	14836.68	15732.5	14920.12	14918.48	15101.95
8	15028.89	14546.1	15118.55	15136.2	14957.43
9	14897.89	13667.6	14700.44	14708.4	14493.58
10	14377.15	14767.4	14562.96	14556.98	14566.12

After prediction, script keeps asking race number to proceed next races.