

Model Building

Predicting The Output Using The Model

Date	11-November-2022
Team ID	PNT2022TMID18620
Project Name	DemandEst - AI powered Food Demand Forecaster

Predicting the output using the model

```
In [74]: testfinal=pd.merge(test,meal_info, on="meal_id", how="outer")
testfinal=pd.merge(testfinal, center_info, on="center_id", how="outer")
testfinal=testfinal.drop(['meal_id','center_id'],axis=1)
tcols=testfinal.columns.tolist()
tcols=tcols[:2]+tcols[8:]+tcols[6:8]+tcols[2:6]
testfinal=testfinal[tcols]
lb1=LabelEncoder()
testfinal['center_type']=lb1.fit_transform(testfinal['center_type'])
lb2=LabelEncoder()
testfinal['category']=lb1.fit_transform(testfinal['category'])
lb1=LabelEncoder()
testfinal['cuisine']=lb1.fit_transform(testfinal['cuisine'])
x_test=testfinal[features].values
```

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In [75]: pred=DT.predict(x_test)
pred[pred<0]=0
submit=pd.DataFrame({'id':testfinal['id'],'num_orders':pred})
```

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In [76]: submit.to_csv("submission.csv",index=False)
submit.describe()
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Out[76]:
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	id	num_orders
count	3.257300e+04	32573.000000
mean	1.248476e+06	262.279027
std	1.441580e+05	362.519131
min	1.000085e+06	15.383333
25%	1.123969e+06	64.710317
50%	1.247296e+06	146.771242
75%	1.372971e+06	320.029801
max	1.499996e+06	6131.000000