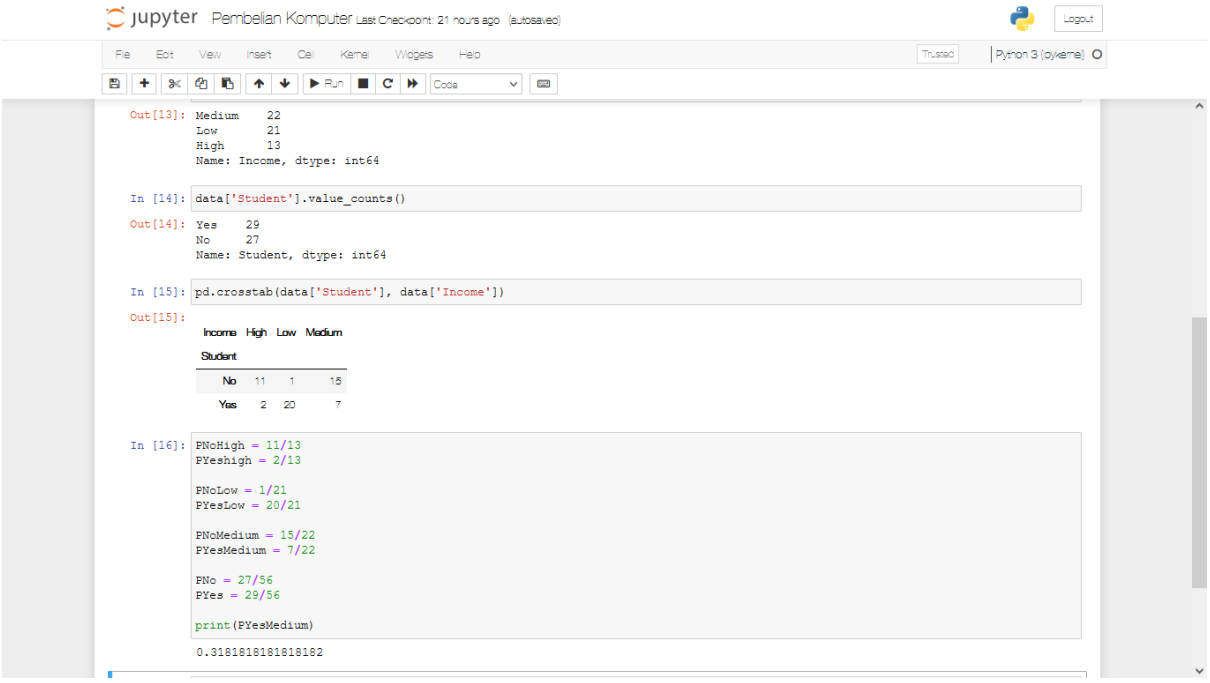
Geulis Juan Ishmah Andini

21.51.0016

Kisi-kisi UAS

1. tingkat pembelian komputer dari Student = Yes, dengan tingkat income = Medium adalah 0.3181818181818182



jupyter Pembelian Komputer Last Checkpoint: 21 hours ago (autosaved)

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Trusted | Python 3 (ipykernel)

Run Code

Out[13]:
```
Medium    22
Low       21
High      13
Name: Income, dtype: int64
```

In [14]:
```
data['Student'].value_counts()
```

Out[14]:
```
Yes    29
No     27
Name: Student, dtype: int64
```

In [15]:
```
pd.crosstab(data['Student'], data['Income'])
```

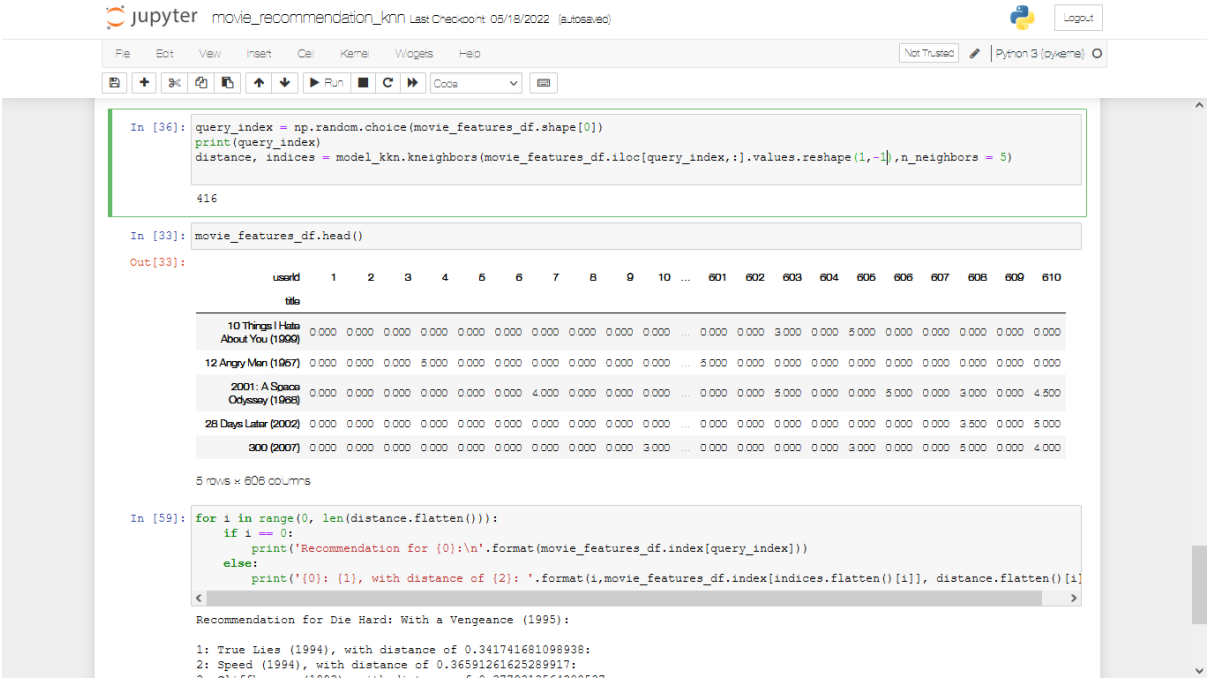
Out[15]:

Student	High	Low	Medium
No	11	1	15
Yes	2	20	7

In [16]:
```
PNoHigh = 11/13
PYeshigh = 2/13

PNoLow = 1/21
PYesLow = 20/21

PNoMedium = 15/22
PYesMedium = 7/22

PNo = 27/56
PYes = 29/56

print(PYesMedium)
```

```
0.3181818181818182
```

2. key = 5



jupyter movie_recommendation_knn Last Checkpoint: 05/19/2022 (autosaved)

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Not Trusted | Python 3 (ipykernel)

Run Code

In [36]:
```
query_index = np.random.choice(movie_features_df.shape[0])
print(query_index)
distance, indices = model_knn.kneighbors(movie_features_df.iloc[query_index,:].values.reshape(1,-1),n_neighbors = 5)
```

```
416
```

In [33]:
```
movie_features_df.head()
```

Out[33]:

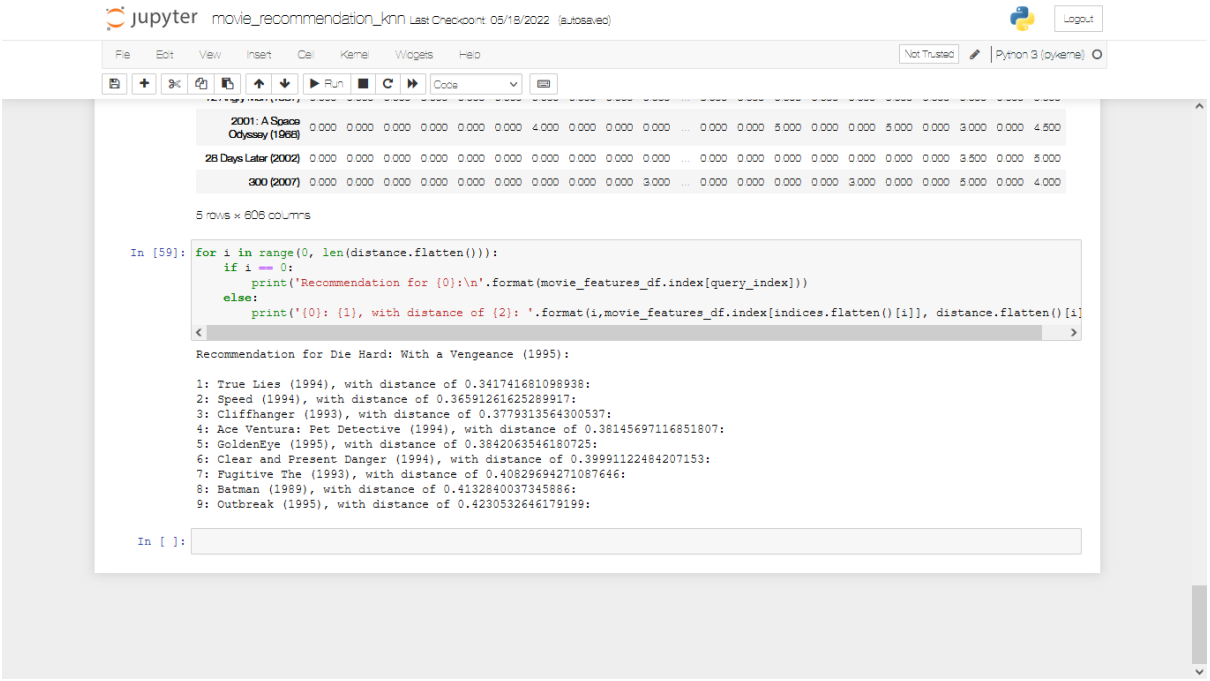
userId	1	2	3	4	5	6	7	8	9	10	...	601	602	603	604	605	606	607	608	609	610
title																					
10 Things I Hate About You (1999)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	...	0.000	0.000	3.000	0.000	5.000	0.000	0.000	0.000	0.000	0.000
12 Angry Men (1957)	0.000	0.000	0.000	5.000	0.000	0.000	0.000	0.000	0.000	0.000	...	5.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2001: A Space Odyssey (1968)	0.000	0.000	0.000	0.000	0.000	0.000	4.000	0.000	0.000	0.000	...	0.000	0.000	5.000	0.000	0.000	5.000	0.000	3.000	0.000	4.500
28 Days Later (2002)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	...	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.500	0.000	5.000
300 (2007)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.000	...	0.000	0.000	0.000	0.000	3.000	0.000	0.000	5.000	0.000	4.000

5 rows × 606 columns

In [59]:
```
for i in range(0, len(distance.flatten())):
    if i == 0:
        print('Recommendation for {0}:\n'.format(movie_features_df.index[query_index]))
    else:
        print('{0}: {1}, with distance of {2}: '.format(i,movie_features_df.index[indices.flatten()[i]], distance.flatten()[i]
```

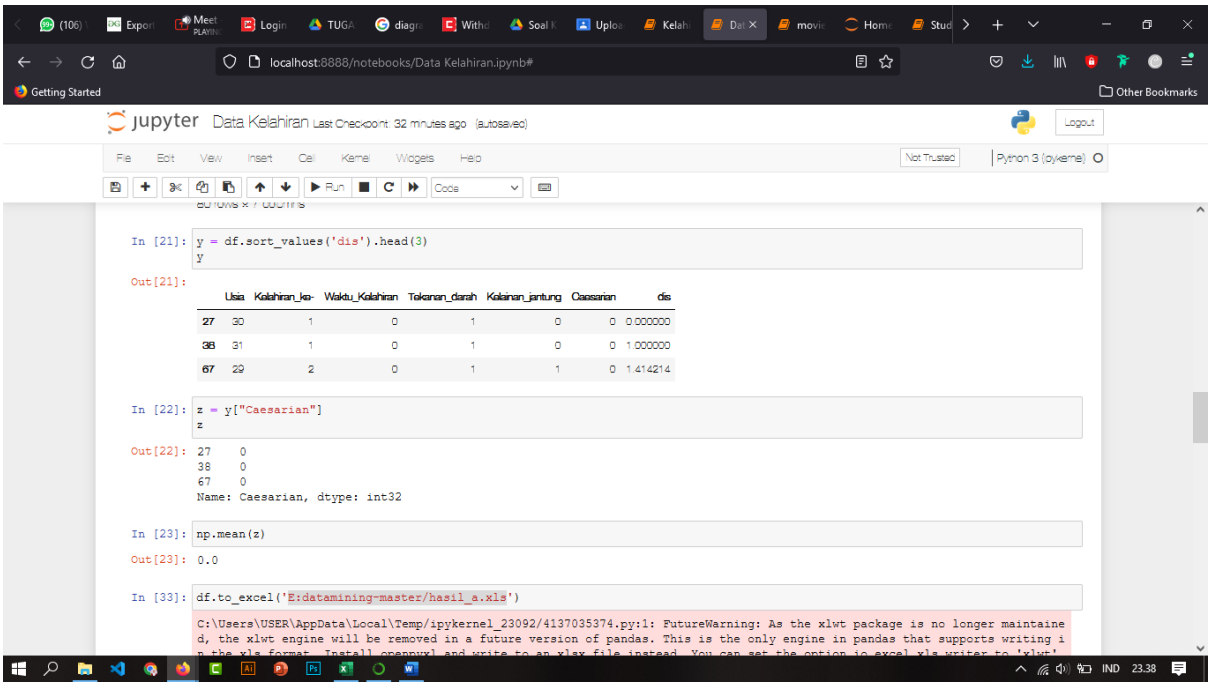
```
Recommendation for Die Hard: With a Vengeance (1995):

1: True Lies (1994), with distance of 0.341741681098938:
2: Speed (1994), with distance of 0.3659126162528991:
```

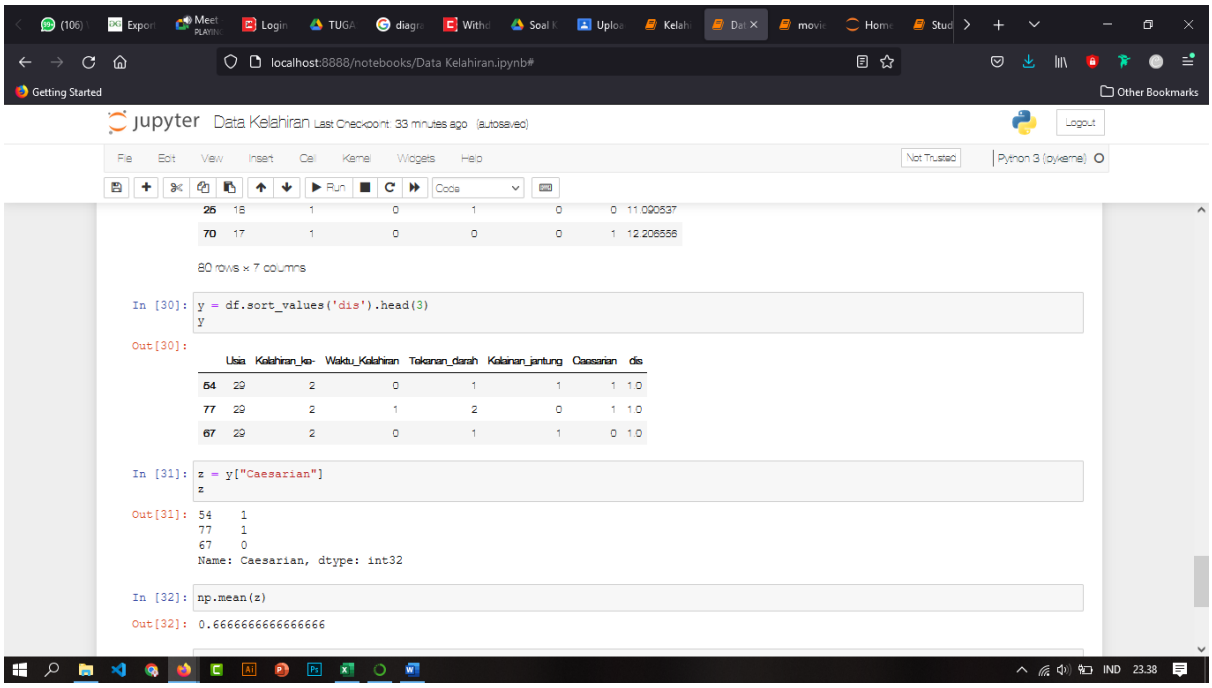


3. kelahiran

a.



b.


localhost:8888/notebooks/Data Kelahiran.ipynb#
jupyter Data Kelahiran Last Checkpoint: 33 minutes ago (autosaved)
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File Edit View Insert Cell Kernel Widgets Help
Not Trusted
Python 3 (pykernel)
Run
Code
25 18 1 0 1 0 0 11.090537
70 17 1 0 0 0 1 12.206556
80 rows × 7 columns
In [30]:
y = df.sort_values('dis').head(3)
y
Out[30]:
Usia Kelahiran_ke- Waktu_Kelahiran Tekanan_darah Kelainan_jantung Caesarian dis
54 29 2 0 1 1 1 1.0
77 29 2 1 2 0 1 1.0
67 29 2 0 1 1 0 1.0
In [31]:
z = y["Caesarian"]
z
Out[31]:
54 1
77 1
67 0
Name: Caesarian, dtype: int32
In [32]:
np.mean(z)
Out[32]:
0.6666666666666666
IND 23.38