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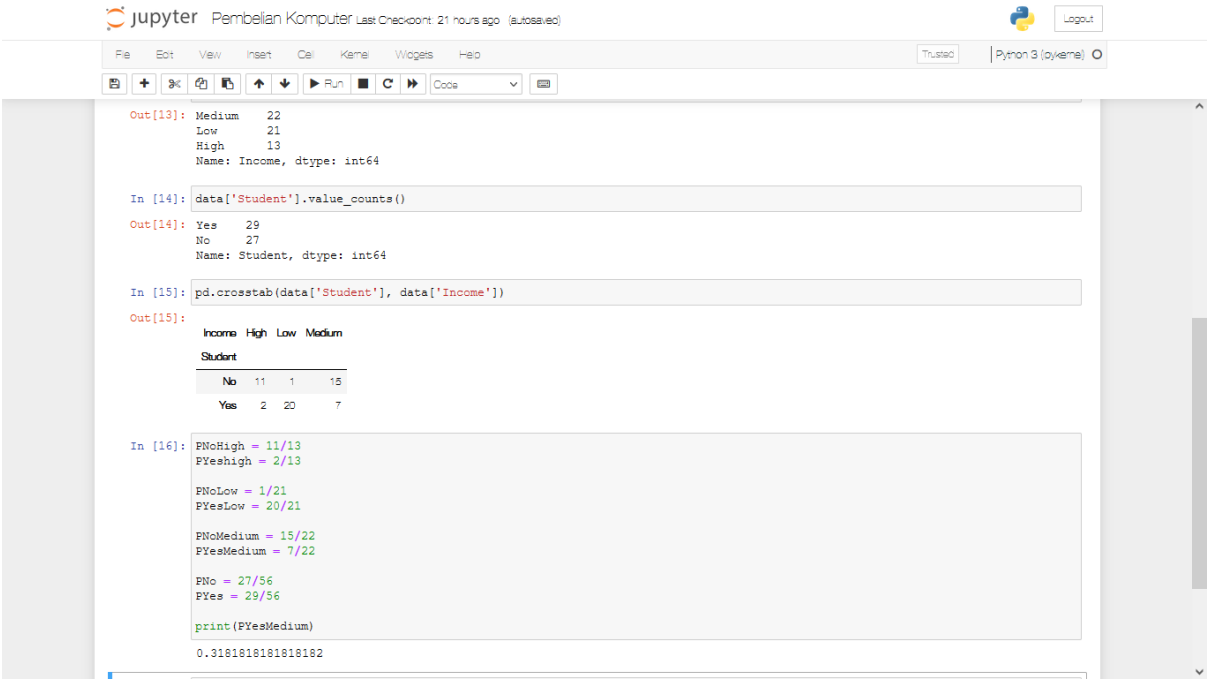
21.51.0016

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)

```
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. nim paling akhir 6. 6 x 2 = 12. key = 12

```
In [17]: query_index = np.random.choice(movie_features_df.shape[0])
         print(query_index)
         distances, indices = model_knn.kneighbors(movie_features_df.iloc[query_index,:].values.reshape(1,-1), n_neighbors = 12)

         406

In [18]: movie_features_df.head()
```

Out[18]:

userId	1	2	3	4	5	6	7	8	9	10	...	601	602	603	604
title															
10 Things I Hate About You (1999)	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	...	0.000000	0.000000	3.000000	0.000000
12 Angry Men (1957)	0.000000	0.000000	0.000000	5.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	...	5.000000	0.000000	0.000000	0.000000
2001: A Space Odyssey (1968)	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	4.000000	0.000000	0.000000	0.000000	...	0.000000	0.000000	5.000000	0.000000
28 Days Later (2002)	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	...	0.000000	0.000000	0.000000	0.000000
300 (2007)	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	3.000000	...	0.000000	0.000000	0.000000	0.000000

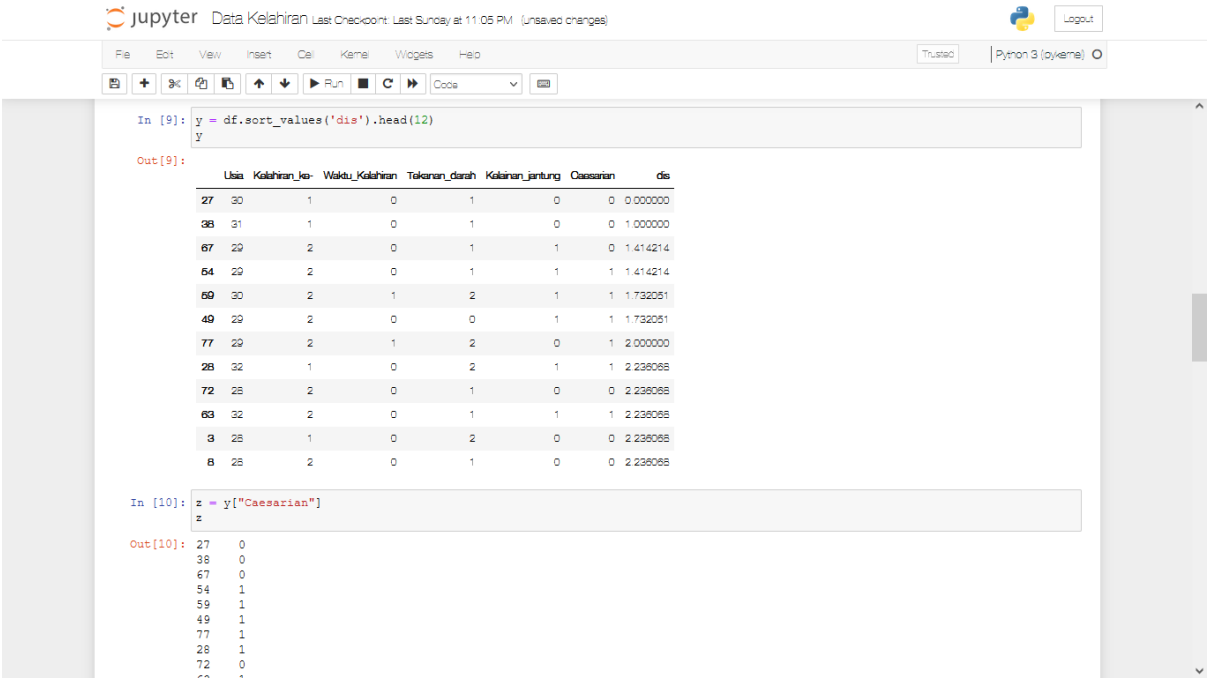
5 rows × 606 columns

```
In [19]: for i in range(0, len(distances.flatten())):
             if i == 0:
                 print('Recommendations 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]], distances.flatten()[i]))

Recommendations for Top Gun (1986):

1: Hunt for Red October, The (1990), with distance of 0.467926561832428
2: Indiana Jones and the Temple of Doom (1984), with distance of 0.4880905747413635
3: Star Wars: Episode VI - Return of the Jedi (1983), with distance of 0.5059959292411804
4: Die Hard (1988), with distance of 0.5100475549697876
5: Men in Black (a.k.a. MIB) (1997), with distance of 0.5124905109405518
6: Terminator, The (1984), with distance of 0.5178987383842468
7: Mask of Zorro, The (1998), with distance of 0.5205039978027344
8: Star Wars: Episode V - The Empire Strikes Back (1980), with distance of 0.5280178189277649
9: Mission: Impossible (1996), with distance of 0.5281343460083008
10: Con Air (1997), with distance of 0.5342025756835938
11: Star Wars: Episode I - The Phantom Menace (1999), with distance of 0.5366891622543335
```

3. kelahiran
   a. key = 6 x 2 = 12




```
In [9]: y = df.sort_values('dis').head(12)
        y
```

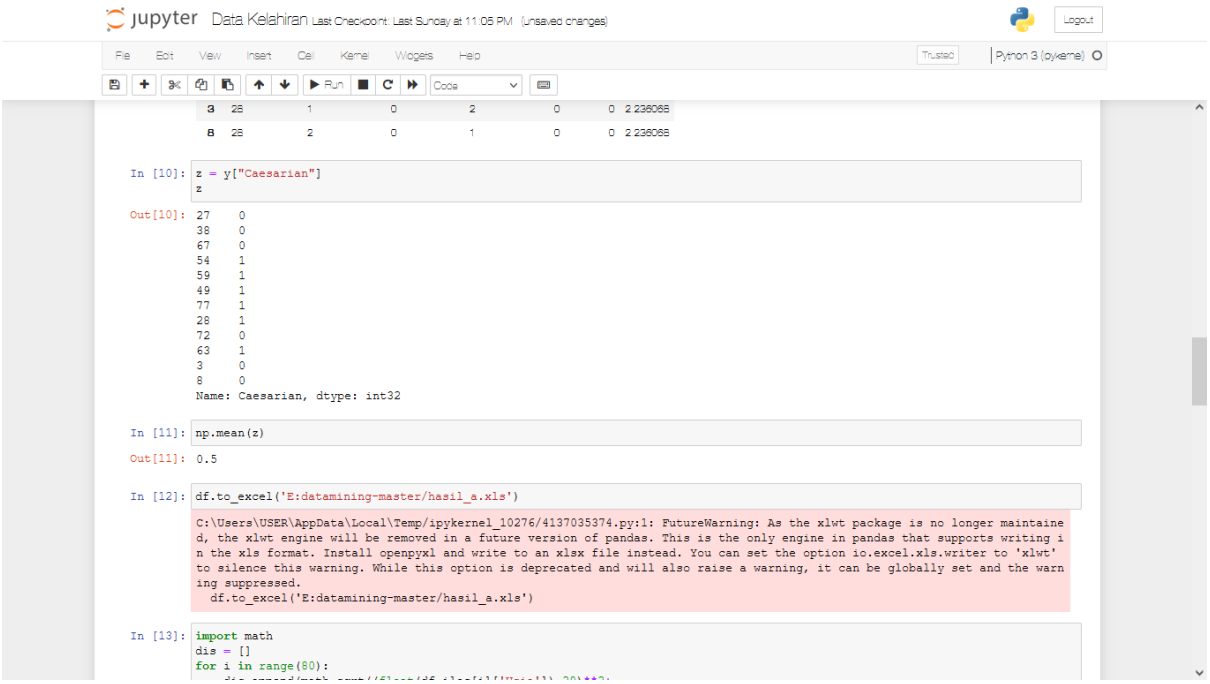
Out[9]:

	Usia	Kelahiran_ke-	Waktu_Kelahiran	Tekanan_darah	Kelainan_jantung	Caesarian	dis
27	30	1	0	1	0	0	0.000000
38	31	1	0	1	0	0	1.000000
67	29	2	0	1	1	0	1.414214
54	29	2	0	1	1	1	1.414214
59	30	2	1	2	1	1	1.732051
49	29	2	0	0	1	1	1.732051
77	29	2	1	2	0	1	2.000000
28	32	1	0	2	1	1	2.236068
72	28	2	0	1	0	0	2.236068
63	32	2	0	1	1	1	2.236068
3	28	1	0	2	0	0	2.236068
8	28	2	0	1	0	0	2.236068

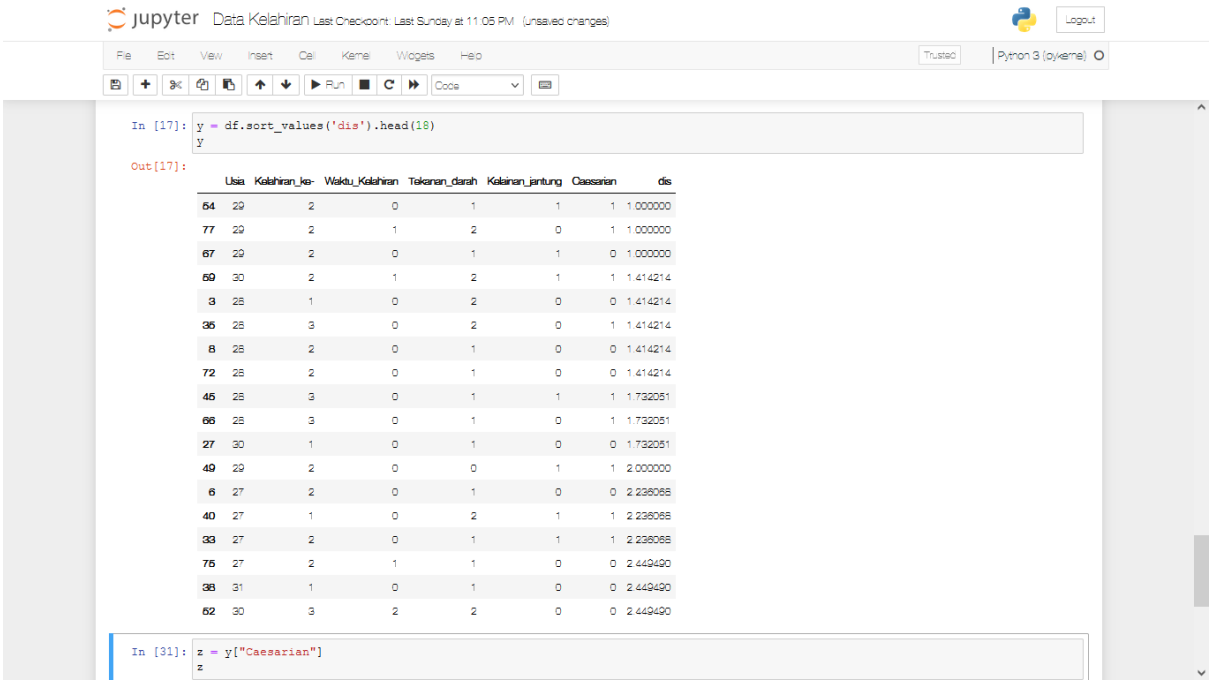
```
In [10]: z = y["Caesarian"]
         z
```

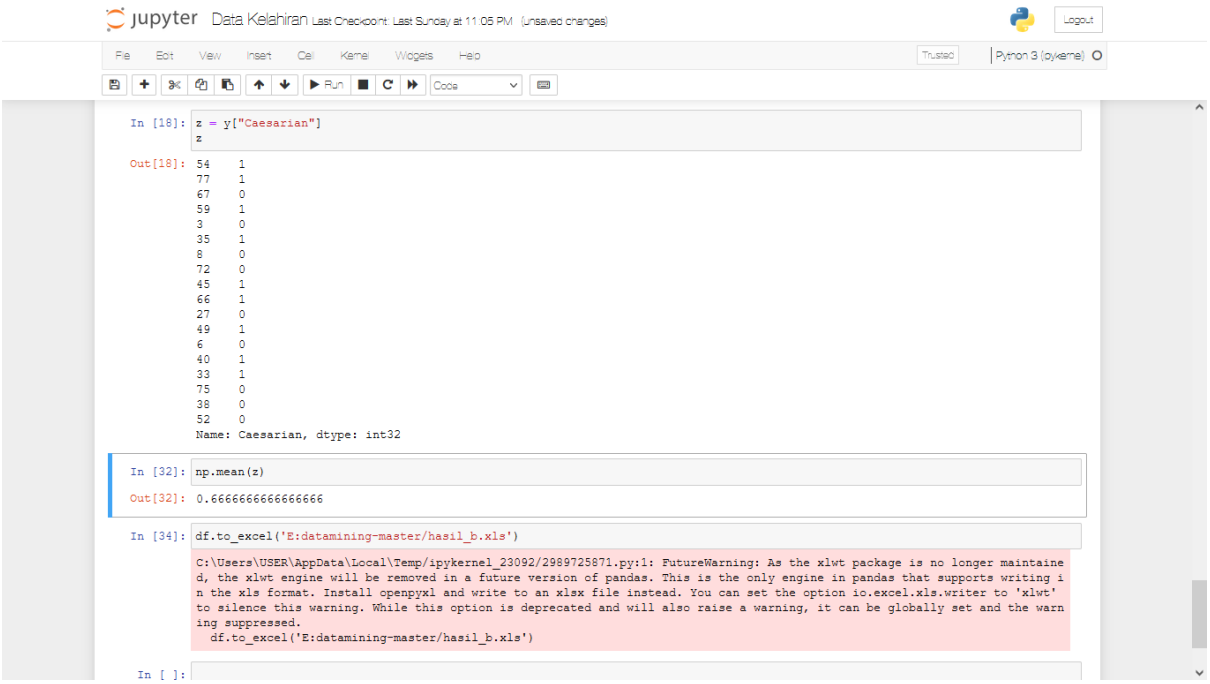
Out[10]:

```
27    0
38    0
67    0
54    1
59    1
49    1
77    1
28    1
72    0
```


jupyter Data Kelahiran Last Checkpoint: Last Sunday at 11:05 PM (unsaved changes)
Logout
File Edit View Insert Cell Kernel Widgets Help
Trusted
Python 3 (pykernel)
Run
Code
3 28 1 0 2 0 0 2.236068
8 28 2 0 1 0 0 2.236068
In [10]:
z = y["Caesarian"]
z
Out[10]:
27 0
38 0
67 0
54 1
59 1
49 1
77 1
28 1
72 0
63 1
3 0
8 0
Name: Caesarian, dtype: int32
In [11]:
np.mean(z)
Out[11]:
0.5
In [12]:
df.to_excel('E:datamining-master/hasil_a.xls')
C:\Users\USER\AppData\Local\Temp/ipykernel_10276/4137035374.py:1: FutureWarning: As the xlwt package is no longer maintaine
d, the xlwt engine will be removed in a future version of pandas. This is the only engine in pandas that supports writing i
n the xls format. Install openpyxl and write to an xlsx file instead. You can set the option io.excel.xls.writer to 'xlwt'
to silence this warning. While this option is deprecated and will also raise a warning, it can be globally set and the warn
ing suppressed.
df.to_excel('E:datamining-master/hasil_a.xls')
In [13]:
import math
dis = []
for i in range(80):

b. key = 6 x 3 = 18


jupyter Data Kelahiran Last Checkpoint: Last Sunday at 11:05 PM (unsaved changes)
Logout
File Edit View Insert Cell Kernel Widgets Help
Trusted
Python 3 (pykernel)
Run
Code
In [17]:
y = df.sort_values('dis').head(18)
y
Out[17]:
Usia Kelahiran_ke- Waktu_Kelahiran Tekanan_darah Kelainan_jantung Caesarian dis
54 29 2 0 1 1 1 1.000000
77 29 2 1 2 0 1 1.000000
67 29 2 0 1 1 0 1.000000
59 30 2 1 2 1 1 1.414214
3 28 1 0 2 0 0 1.414214
35 28 3 0 2 0 1 1.414214
8 28 2 0 1 0 0 1.414214
72 28 2 0 1 0 0 1.414214
45 28 3 0 1 1 1 1.732051
66 28 3 0 1 0 1 1.732051
27 30 1 0 1 0 0 1.732051
49 29 2 0 0 1 1 2.000000
6 27 2 0 1 0 0 2.236068
40 27 1 0 2 1 1 2.236068
33 27 2 0 1 1 1 2.236068
75 27 2 1 1 0 0 2.449490
38 31 1 0 1 0 0 2.449490
52 30 3 2 2 0 0 2.449490
In [31]:
z = y["Caesarian"]
z


jupyter Data Kelahiran Last Checkpoint: Last Sunday at 11:05 PM (unsaved changes)
Logout
File Edit View Insert Cell Kernel Widgets Help
Trusted
Python 3 (ipykernel)
Run
Code
In [18]:
z = y["Caesarian"]
z
Out[18]:
54 1
77 1
67 0
59 1
3 0
35 1
8 0
72 0
45 1
66 1
27 0
49 1
6 0
40 1
33 1
75 0
38 0
52 0
Name: Caesarian, dtype: int32
In [32]:
np.mean(z)
Out[32]:
0.6666666666666666
In [34]:
df.to_excel('E:datamining-master/hasil_b.xls')
C:\Users\USER\AppData\Local\Temp/ipykernel_23092/2989725871.py:1: FutureWarning: As the xlwt package is no longer maintaine
d, the xlwt engine will be removed in a future version of pandas. This is the only engine in pandas that supports writing i
n the xls format. Install openpyxl and write to an xlsx file instead. You can set the option io.excel.xls.writer to 'xlwt'
to silence this warning. While this option is deprecated and will also raise a warning, it can be globally set and the warn
ing suppressed.
df.to_excel('E:datamining-master/hasil_b.xls')
In [ ]: