

In [5]:

```
import pandas as pd
import numpy as np
import matplotlib.pyplot as plt
%matplotlib inline
```

In [6]:

```
pd.__version__
```

Out[6]:

'1.0.1'

In [7]:

```
data = pd.read_csv('E:/fahmi/uas_mining/no4/dataset_soal No. 4.txt', delimiter=',')
```

In [8]:

```
data
```

Out[8]:

	Usia	Kelahiran_ke-	Waktu_Kelahiran	Tekanan_darah	Kelainan_jantung	Caesarian
0	22	1	0	2	0	0
1	26	2	0	1	0	1
2	26	2	1	1	0	0
3	28	1	0	2	0	0
4	22	2	0	1	0	1
...
75	27	2	1	1	0	0
76	33	4	0	1	0	1
77	29	2	1	2	0	1
78	25	1	2	0	0	1
79	24	2	2	1	0	0

80 rows x 6 columns

In [9]:

```
import math
dis = []
for i in range(80):
    dis.append(math.sqrt((float(data.iloc[i]['Usia'])-29)**2+
        (float(data.iloc[i]['Kelahiran_ke-'])- 2)**2+
        (float(data.iloc[i]['Waktu_Kelahiran'])-0)**2+
        (float(data.iloc[i]['Tekanan_darah'])-2)**2))
```

In [10]:

```
data['dis'] = dis
data
```

Out[10]:

	Usia	Kelahiran_ke-	Waktu_Kelahiran	Tekanan_darah	Kelainan_jantung	Caesarian	dis
0	22	1	0	2	0	0	7.071068
1	26	2	0	1	0	1	3.162278
2	26	2	1	1	0	0	3.316625
3	28	1	0	2	0	0	1.414214
4	22	2	0	1	0	1	7.071068

...	Usia	Kelahiran_ke-	Waktu_Kelahiran	Tekanan_darah	Kelainan_jantung	Caesarian	dis
75	27	2	1	1	0	0	2.449490
76	33	4	0	1	0	1	4.582576
77	29	2	1	2	0	1	1.000000
78	25	1	2	0	0	1	5.000000
79	24	2	2	1	0	0	5.477226

80 rows × 7 columns

In [11]:

```
data.sort_values('dis')
```

Out[11]:

	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
...
61	19	1	0	1	0	1	10.099505
26	18	1	1	2	1	1	11.090537
31	40	1	0	1	1	1	11.090537
25	18	1	0	1	0	0	11.090537
70	17	1	0	0	0	1	12.206556

80 rows × 7 columns

In [12]:

```
y = data.sort_values('dis').head(5)
y
```

Out[12]:

	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

In [13]:

```
z = y["Caesarian"]
z
```

Out[13]:

```
54    1
77    1
67    0
59    1
3     0
Name: Caesarian, dtype: int64
```

In [14]:

```
np.mean(z)
```

Out[14]:

0.6

In [15]:

```
data.to_excel('E:/fahmi/uas_mining/no4/output_no4b.xls')
```

In []: