

```
In [1]: import pandas as pd
df = pd.read_csv("C:/Users/jain/Desktop/Kovan_FinalityTime.csv")
df.head()
```

Out[1]:

	Transaction Hash	Time Taken
0	0x92ff35f1b433c6ba871e70679eac683ea4e76e44032b...	16
1	0xd8d3b0d6d10c8f4ac3ea93047994c899c12e1927e2d6...	16
2	0x5e40ef459c678ecf52a2c971a1715dfa663b83d66e41...	20
3	0xd92a71af3b669111558023a910cdaa63161a300bd42e...	13
4	0x82c4c8d0010b35394b0df2078c09d73eea79af28d68b...	8

```
In [2]: df.shape
```

Out[2]: (182, 2)

```
In [3]: df.describe()
```

Out[3]:

	Time Taken
count	182.000000
mean	10.516484
std	3.884699
min	3.000000
25%	8.000000
50%	10.000000
75%	12.750000
max	21.000000

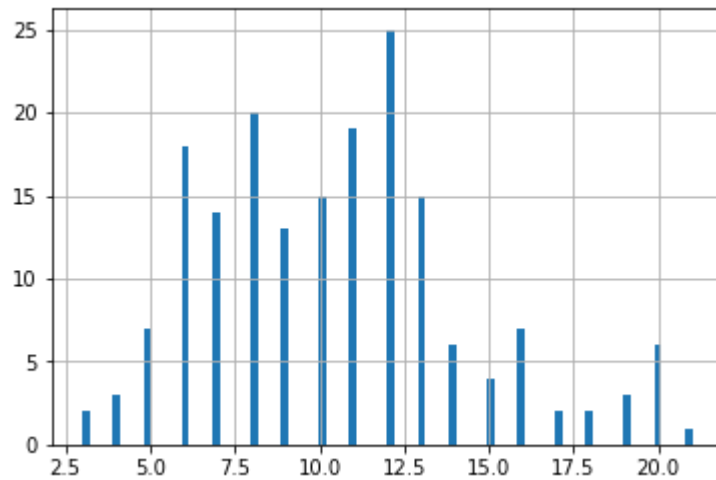
```
In [4]: count = df['Time Taken'].value_counts(sort=False)
print(count)
```

```
3      2
4      3
5      7
6     18
7     14
8     20
9     13
10     15
11     19
12     25
13     15
14      6
15      4
16      7
17      2
18      2
19      3
20      6
21      1
```

Name: Time Taken, dtype: int64

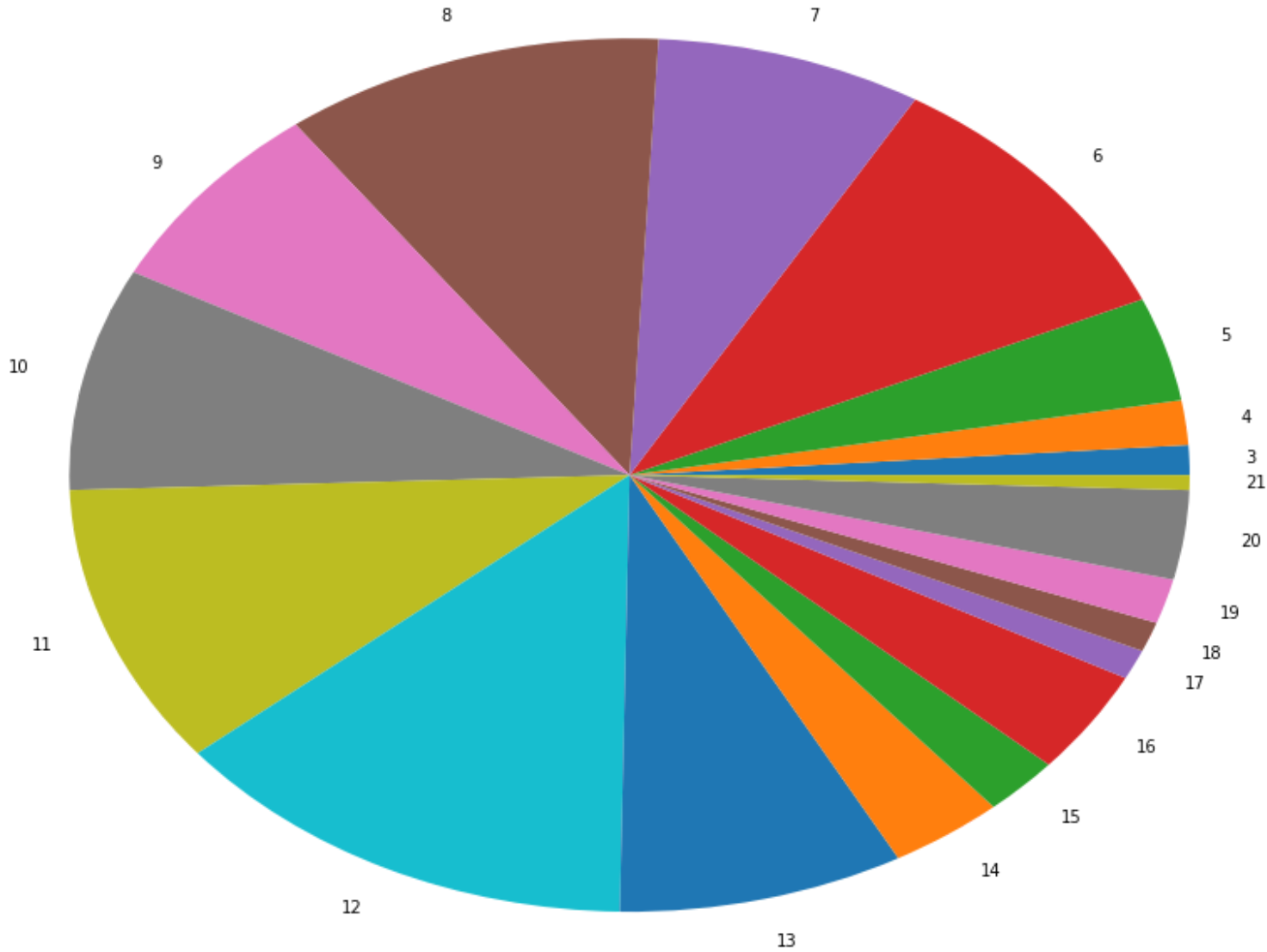
```
In [6]: import matplotlib.pyplot as plt  
df['Time Taken'].hist(bins=80)
```

Out[6]: <matplotlib.axes.\_subplots.AxesSubplot at 0x2d3df387dd8>



```
In [7]: import matplotlib.pyplot as plt
fig = plt.figure(figsize =(15, 12))
plt.title('Numbers representing time in seconds taken by transaction.')
plt.pie(count.values, labels = count.index)
plt.show()
```

Numbers representing time in seconds taken by transaction.



As per the analysis from above data, we inferred that majority of transactions has a finality time of below 13 seconds. There are only 31 transactions who crosses the time of above 13 seconds out of 186 transactions but they lies in the range of 14-21 seconds. So, overall standard deviation is not high and mean value is 10.5. Hence, the finality time approximate value is 60sec. (Mean + std deviation + considerable transactions having time above 13 seconds (max value is 21 seconds) + outliers consideration.)