In [1]:

```
import numpy as np
import pandas as pd
np.random.seed(1)
```

In [2]:

```
def random_sequence_generator():

    sequence=[]
    final_sequence=[]

    for count in range(750):

        num1=[1,2,3,4,5,6,7,8,9,10]
        num2=[8,9,5,7,11,6,12,4,3,10]
        num3=[20,17,12,13,16,15,14,19,22,25]
        num4=[22,27,21,26,19,24,28,25,17,16]
        num5=[29,28,35,33,32,31,30,26,27,34]
        num6=[37,36,33,41,39,42,32,34,38,40]
        num7=[45,44,43,40,42,41,39,38,37,35]


        number_sequence=np.array([np.random.choice(num1),np.random.choice(r


        if sum(number_sequence)<=180 and sum(number_sequence)>=120:
            if np.count_nonzero(number_sequence%2==0)==3 or np.count_nonzer

                sequence.append(number_sequence)

            else:
                pass

        else:
            pass

    for i in sequence:


        unique_sequence=[]

        for j in i:

            if j not in unique_sequence:
                unique_sequence.append(j)

        if len(unique_sequence)==7:
            final_sequence.append(unique_sequence)

    return final_sequence
```

In [3]:
```
Lottery_Lots=random_sequence_generator()
sequence_pool=pd.DataFrame(Lottery_Lots,
                columns=[['Number-1','Number-2','Number-3','Number-4','Numb
                'Number-6','Number-7']])

even_series=np.count_nonzero(sequence_pool%2==0,axis=1)
odd_series=np.count_nonzero(sequence_pool%2!=0,axis=1)

sequence_pool['Even']=even_series
sequence_pool['Odd']=odd_series

sequence_pool['Sum']=sequence_pool.sum(axis=1)
```

In [4]:
```
sequence_pool.shape
```

Out[4]: (305, 10)

In [5]:
```
sequence_pool.to_excel('FinalSequence.xlsx')
```

In [ ]: