Assignment 2

EXERCICE 1

a) Let's formulate the revenue maximization problem :

If we consider x_i as the price of the bucket number i we can write the maximization problem as follow :

$$\max J(x_1, x_2, x_3) = \sum_{n=1}^3 x_i * D_i(x_i)$$

under the equlity constraints of the total number of seats equal to 150 :

$$g(x_1,x_2,x_3) = \sum_{n=1}^3 \overset{\cdot}{D_i}(x_i) - 150 = 0$$

b) Let's optimize our problem :

$$\max J(x)$$
 s.t $g(x_1,x_2,x_3)=0$

Since our problem is non linear we will use the sequential quadratic programming method (SQP) which is well suited for non lineary constrained problems.

The lagrangian of this problem is :
$$L(x,\lambda)=J(x)-\lambda^T*g(x)$$
 and the first-order optimality condition is: $\nabla L(x,\lambda)=0$

Using the newton method the system of equations representing the first-order optimality conditions for the optimization problem is :

$$q(p) = 1/2p^T * [
abla^2 xxL(x_k,\lambda_k)]p + p^T [
abla_x L(x_k,\lambda_k)] \ ext{s.t} [
abla g(x_k)]^T p + g(x_k) = 0$$

This optimization problem is a quadratic program; that is, it is the minimization of a quadratic function subjected to linear constraints.

The quadratic function is a Taylor series approximation to the Lagrangian at (x_k, λ_k) , and the constraints are a linear approximation to $g(x_k+p)=0$.

We used in the current application the python scipi.optimize library tool wich has a built in method SQLP 'Sequential Least SQuares Programming' starting with an intial guess of [500,400,100]

In [371]:

```
import numpy as np
import math
from scipy.optimize import minimize
a1=100
a2 = 150
a3 = 300
def f(params):
                     x,y,z = params
                     return -100*math.exp(-1/100*x)*x - 150*math.exp(-1/150*y)*y - 300*math.exp(-1/300*z)*x - 150*math.exp(-1/150*y)*y - 300*math.exp(-1/300*z)*x - 150*math.exp(-1/150*y)*x - 150*math.ex
)*z
x0 = np.array([500,400, 100])
def apply_sum_constraint(params):
                     x,y,z = params
                     total = 150-100*math.exp(-1/100*x) - 150*math.exp(-1/150*y) - 300*math.exp(-1/300*z)
) #equality constraints
                     return total
my_constraints = ({'type': 'eq', "fun": apply_sum_constraint })
```

In [372]:

```
res = minimize(f, x0, method='SLSQP',options={'xtol': 1e-8, 'disp': True},constraints=
my_constraints)
param=100,150,300
```

```
Optimization terminated successfully. (Exit mode 0)

Current function value: -43670.85883555805

Iterations: 18

Function evaluations: 93

Gradient evaluations: 18
```

C:\ProgramData\Anaconda3\lib\site-packages\ipykernel_launcher.py:1: Optimi
zeWarning: Unknown solver options: xtol
 """Entry point for launching an IPython kernel.

• The solution to this problem is $x^* = [156.74860643, 206.74899586, 356.74781447]$ which corresponds to an optimal rounded prices of 157ϵ for the first bucket and 207ϵ for the second bucket and 357ϵ for the third bucket

```
In [373]:
```

```
Out[373]:
    fun: -43670.85883555805
    jac: array([11.8359375 , 14.30078125, 17.27832031])
message: 'Optimization terminated successfully.'
    nfev: 93
    nit: 18
    njev: 18
    status: 0
success: True
        x: array([156.74860643, 206.74899586, 356.74781447])
```

In [374]:

```
#Cheking total number of seats
x,y,z = res.x
print ('number of seats sold with for bucket 1 is: ',round(100*math.exp(-1/100*x)),'wi
th price',round(x),'$')

print ('number of seats sold with for bucket 2 is: ',round(150*math.exp(-1/150*y)) ,'w
ith price',round(y),'$')

print ('number of seats sold with for bucket 3 is: ',round(300*math.exp(-1/300*z)),'wi
th price',round(z),'$')

globalprice1=round(100*math.exp(-1/100*x))*x+round(150*math.exp(-1/150*y))*y+round(300*
math.exp(-1/300*z))*z
print ('The global revenue is:',globalprice1)
```

```
number of seats sold with for bucket 1 is: 21 with price 157.0 $ number of seats sold with for bucket 2 is: 38 with price 207.0 $ number of seats sold with for bucket 3 is: 91 with price 357.0 $ The global revenue is: 43612.23369478468
```

c)

a)

The global revenue should be higher if we squeeze more places but, the individual bucket price should be bit cheaper. We change the equality constraints to 153 and see the price change

```
In [375]:
```

```
def apply_sum_constraint(params):
    x,y,z = params
    total = 153-100*math.exp(-1/100*x) - 150*math.exp(-1/150*y) - 300*math.exp(-1/300*z)
   #equality constraints
    return total
my_constraints = ({'type': 'eq', "fun": apply_sum_constraint })
res = minimize(f, x0, method='SLSQP',options={'xtol': 1e-8 , 'disp': True},constraints=
my constraints)
Optimization terminated successfully.
                                         (Exit mode 0)
            Current function value: -43835.26962060771
            Iterations: 18
            Function evaluations: 102
            Gradient evaluations: 18
C:\ProgramData\Anaconda3\lib\site-packages\ipykernel_launcher.py:8: Optimi
zeWarning: Unknown solver options: xtol
In [376]:
res
Out[376]:
```

```
fun: -43835.26962060771
    jac: array([11.46337891, 13.67285156, 16.30859375])
message: 'Optimization terminated successfully.'
    nfev: 102
    nit: 18
```

njev: 18 status: 0 success: True

x: array([152.87380444, 202.87530806, 352.87413956])

As we see bellow , we notice a global price change of 3.87\$ and a global revenue increase of 480 dollars

```
In [377]:
```

```
old =np.array([156.74860643, 206.74899586, 356.74781447]) # old bucket prices
new=np.array([152.87380444, 202.87530806, 352.87413956]) # new prices
pricedif=old-new
print("The price difference is: ",pricedif)
```

The price difference is: [3.87480199 3.8736878 3.87367491]

In [378]:

```
x,y,z = res.x
100*math.exp(-1/100*x) +150*math.exp(-1/150*y) + 300*math.exp(-1/300*z)
x,y,z = res.x
print ('number of seats sold with for bucket 1 is: ',round(100*math.exp(-1/100*x)),'wi
th price',round(x),'$')

print ('number of seats sold with for bucket 2 is: ',round(150*math.exp(-1/150*y)) ,'w
ith price',round(y),'$')

print ('number of seats sold with for bucket 1 is: ',round(300*math.exp(-1/300*z)),'wi
th price',round(z),'$')

globalprice2=round(100*math.exp(-1/100*x))*x+round(150*math.exp(-1/150*y))*y+round(300*
math.exp(-1/300*z))*z
globalprice2-globalprice1
```

```
number of seats sold with for bucket 1 is: 22 with price 153.0 \$ number of seats sold with for bucket 2 is: 39 with price 203.0 \$ number of seats sold with for bucket 1 is: 93 with price 353.0 \$
```

Out[378]:

480.4219958394242

EXERCICE 2

a) Let's minimize the following (Rosenbrock) function:

$$minf(x) = 100(x_2 - x_1^2)^2 + (1 - x_1)^2$$
 s.t $x_1, x_2 \in [-5, 5]^2$

First of all we will use the non linear conjugate gradient method and the quasi-newton BFGS method :

In [428]:

```
from scipy.optimize import rosen,rosen_hess, rosen_der,fmin_cg,fmin_bfgs # we import ro
sen function,it'gradient and hessian
import time
import pandas as pd

banana_hess=rosen_hess
banana=rosen
banana_der=rosen_der
```

 Let's define a fuction opti that will apply an optimisation method each run it's parameters are method (only fmin_cg,fmin_BFGS), the starting point x0 (np array), the objective function and the objectivefunction derivative

In [429]:

```
def opti(method,x0,objfunc,objfunc_der):
    return method(objfunc, x0, fprime=objfunc_der, gtol=1e-5, full_output=1, disp= 0,
retall=1)
```

• Now let's define a function "run" that will run our minimisation it takes as parameters the number of runs the method used (only those used in optim), the obj. function and the obj. func derivative and it returns a list containing a dataframe and a list of dataframes.

The first element is a df containing the starting point , ending point and the number of itterations in each run .

The list contains dataframes holding obj funct evaluation/iteration for each run

In [441]:

```
def run(runs,method,objfunc,objfunc_der,a,b) :
    times=[]
    start_point=[] # starting point for each run
    end_point=[]
                    # ending point for each run
    maxiter=[] # max iteration of each run
    J eval=[]
               # it will hold obj funct evaluations at all interm iterations
    iterhist=[] # it will hold dataframes which contains obj function evaluations for e
ach itteration,
                # iterhist[0] corresponds to run 1 dataframe ....
    d={'number of iterations':maxiter,'Starting_point':start_point,'Final_point':end po
int,'runtime (sec)':times}
    # we generate N(runs) random number to start
    #x0=runs*np.random.randn(runs, 2)
    x0=(b-a)* np.random.random sample((runs, 2)) + a
    for j in range(runs):
        start = time.time()
        res2= opti(method,x0[j],objfunc,objfunc_der) #conjugate gradient providing func
tion gradient
        end = time.time()
        runtime = end - start
        times.append(runtime)
        start_point.append(x0[j].tolist())
        end_point.append(res2[0].tolist())
        maxiter.append(len(res2[-1])-1)
        for i in range((len(res2[-1])-1)): J eval.append(objfunc(res2[-1][i]))
        d1={'iteration number':np.arange(maxiter[j]).tolist(),'obj function':J eval}
        df iterhist=pd.DataFrame(d1) # data frame holding obj funct evaluation/iterati
on
        iterhist.append(df iterhist) # list containg all iterhist dataframes
        J_eval=[]
    df method=pd.DataFrame(d) # data frame holding starting point , ending poit and num
ber of itterations and runtime
    return [df_method, iterhist]
```

Now let's apply run to the banana function minimization using the conjugate gradient method and 10 runs

In [442]:

```
resultat1=run(10,fmin_cg,banana,banana_der,-5,5)
df_CG_ban=resultat1[0]
CG_Hislist_ban=resultat1[1] #List of all iterhist dataframes in all runs
```

Bellow a dataframe showing the starting pt and ending point for the CG method :

In [443]:

```
df_CG_ban
```

Out[443]:

	number of iterations	Starting_point	Final_point	runtime (sec)
0	11	[-4.216527308372929, 0.2810938904042102]	[0.9999999651634625, 0.9999999127788475]	0.003033
1	34	[3.52245816436011, 0.9030305681406894]	[1.000007308363726, 1.0000146460987005]	0.003999
2	18	[0.28101391950373067, -2.6891750390399416]	[0.999999184424358, 0.9999983651956019]	0.001965
3	14	[-4.23860129180449, -2.596828478007338]	[1.0000000080907159, 1.0000000162252833]	0.002006
4	18	[-4.790980801908247, 3.648611802537415]	[0.9999969777346454, 0.999993936427741]	0.002995
5	21	[-0.018407125864598584, 2.411864687856651]	[0.9999958749218326, 0.9999917236909176]	0.002039
6	21	[1.7565113865582553, -2.375048442775496]	[1.0000000020069375, 1.0000000040205383]	0.003214
7	28	[4.308450571716119, -0.0670061760480154]	[1.0000000307449195, 1.0000000384759933]	0.004035
8	13	[4.862633157267576, -4.374279876379661]	[0.99999986057627, 0.999999720557593]	0.002001
9	14	[-3.854454834265405, -3.9484947190414132]	[0.9999999778600922, 0.9999999556316487]	0.001984

Now let's apply run to the banana function minimization using the BFGS method and 10 runs

In [444]:

```
resultat2=run(10,fmin_bfgs,banana,banana_der,-5,5)
df_bfgs_ban=resultat2[0]
bfgs_Hislist_ban=resultat2[1]
```

Bellow a dataframe showing the starting pt and ending point for the BFGS method :

In [445]:

df_bfgs_ban

Out[445]:

	number of iterations	Starting_point	Final_point	runtime (sec)
0	23	[2.3143861745410383, 3.7336039403946337]	[1.0000001252613975, 1.0000002590906971]	0.003000
1	35	[1.8523417937936246, -0.01842590534130295]	[0.9999999092754825, 0.9999998160686822]	0.002996
2	19	[0.8299780692027809, 1.2950446735206391]	[1.00000002804172, 1.000000053418259]	0.002002
3	50	[-1.3807229642459475, -2.323285351689023]	[0.999999994856204, 0.999999989820141]	0.006040
4	27	[2.0280834512241475, 4.839858001764918]	[1.000000327777861, 1.0000006447467238]	0.002000
5	27	[0.07288439401782121, 4.732211324426302]	[0.999999972561879, 0.9999999944211717]	0.002038
6	64	[3.949501716633261, -0.24972944302762912]	[1.0000001994273475, 1.0000004035436003]	0.008993
7	55	[4.78323502142692, 3.04254303316365]	[1.0000000123263444, 1.0000000126002768]	0.004966
8	73	[-3.989010509391442, -2.7478809014850003]	[1.0000000050492375, 1.000000009221483]	0.007007
9	18	[0.7814457780929889, 1.8429687860510846]	[1.000000001023903, 1.000000001276876]	0.001987

Now lets plot the objfunction evaluations against itteration numbers :

In [446]:

```
import matplotlib.pyplot as plt

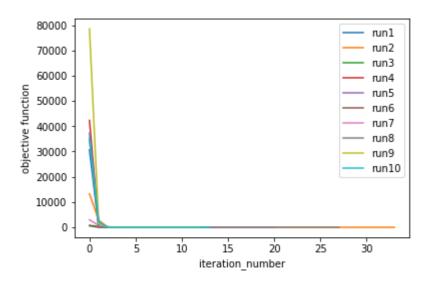
for frame in CG_Hislist_ban:
    plt.plot(frame['iteration_number'], frame['obj_function'])

plt.xlabel('iteration_number')
plt.ylabel('objective function')

plt.legend(['run1','run2','run3','run4','run5','run6','run7','run8','run9','run10'], lo
c='upper right')
```

Out[446]:

<matplotlib.legend.Legend at 0x1271d898ef0>



a) Let's minimize the egcrate function :

In [447]:

```
def egcrate(x):
    return np.sum((x[1:]**2 + x[:-1]**2.0)+ 25*(math.sin(x[1:])**2+math.sin(x[:-1])
**2 ), axis=0)
```

In [448]:

```
def egcrate_der(x):
    return np.array([np.sum(2*x[:-1]+25*math.sin(2*x[:-1])),np.sum(2*x[1:]+25*math.sin(
2*x[1:]))])
```

In [449]:

```
resultat1=run(10,fmin_cg,egcrate,egcrate_der,-2*math.pi,2*math.pi)
df_CG_egc=resultat1[0]
CG_Hislist_egc=resultat1[1] #List of all iterhist dataframes in all runs
```

Bellow a dataframe showing the starting pt and ending point for the CG method :

In [450]:

df_CG_egc

Out[450]:

	number of iterations	Starting_point	Final_point	runtime (sec)
0	5	[-0.3892030828755759, 3.5297298627600604]	[9.912667260343878e-08, 3.0196017609637984]	0.001037
1	8	[4.909131103189871, 0.9778877010437839]	[3.019601931387161, 6.526626241041525e-09]	0.000780
2	4	[-5.40840245989612, -6.053584563819906]	[-6.031424001516337, -6.031423964319464]	0.001000
3	7	[1.4403616351538728, -3.9506454669175355]	[-7.512366852532413e-10, -3.0196018820444905]	0.001104
4	7	[4.234732097436005, -0.5780909563938588]	[-1.1615596302188592e-11, 4.788325053979971e-12]	0.000994
5	4	[2.9069250556399915, -4.201809171167595]	[3.0196018863881005, -3.019601885920396]	0.000000
6	6	[5.207356109918887, -0.058451352475483276]	[6.031424012376059, 1.0625013557378541e-10]	0.000962
7	4	[-0.5309880349854916, -0.5309668266112473]	[-4.596087697711013e-12, -4.5943414986326665e-12]	0.000998
8	5	[1.3829805836695117, 0.9476319912384996]	[-3.055059909546254e-13, 5.210580032121413e-14]	0.001997
9	6	[-0.9298393453702385, -2.100608970760736]	[-7.067194295587508e-09, -3.0196018745851694]	0.001003

Now let's apply run to the banana function minimization using the BFGS method and 10 runs

In [452]:

```
resultat2=run(10,fmin_bfgs,egcrate,egcrate_der,-2*math.pi,2*math.pi)
df_bfgs_egc=resultat2[0]
bfgs_Hislist_egc=resultat2[1]
```

Bellow a dataframe showing the starting pt and ending point for the BFGS method:

In [453]:

df_bfgs_egc

Out[453]:

	number of iterations	Starting_point	Final_point	runtime (sec)
0	5	[3.953373489507605, 2.5658954071377735]	[3.0196018909233775, 3.019601741204051]	0.000954
1	9	[1.4132566690064143, 3.6926005146029173]	[1.0439329730126542e-07, 3.0196019487696835]	0.001041
2	9	[2.775509285238675, 1.4478012773223554]	[3.0196018827120215, 2.015063431143951e-08]	0.001015
3	7	[5.601809434167679, -0.8526428397440444]	[6.031424012301511, -1.874395053893541e-09]	0.000999
4	9	[5.577597914021492, 4.517518029320895]	[6.031423927534459, 3.0196019309501563]	0.002038
5	6	[-0.1842128049326055, -5.967146915108889]	[7.587030441924938e-09, -6.0314239736115525]	0.001003
6	7	[-2.2277962496124255, 3.3565654869101103]	[-3.019601703839683, 3.019601972006369]	0.000978
7	6	[2.088749648652744, -5.212436465994967]	[3.0196018619988467, -6.031424005809182]	0.000966
8	6	[-0.8925615419492479, -0.7510653512619161]	[2.500037745931438e-08, -3.309989944585263e-10]	0.001050
9	5	[2.2589603272671432, -3.0304621447533258]	[3.0196018741047745, -3.019601869928152]	0.000996

we can see that the egcrate function is most of the time locked in a local minima

In [396]:

```
import matplotlib.pyplot as plt

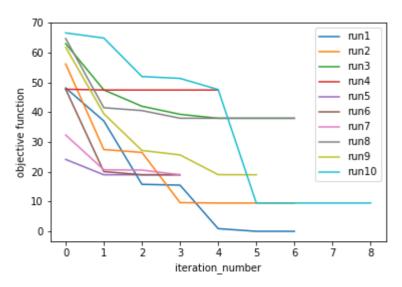
for frame in CG_Hislist_egc:
    plt.plot(frame['iteration_number'], frame['obj_function'])

plt.xlabel('iteration_number')
    plt.ylabel('objective function')

plt.legend(['run1','run2','run3','run4','run5','run6','run7','run8','run9','run10'], lo c='upper right')
```

Out[396]:

<matplotlib.legend.Legend at 0x1271eb18438>



EXERCISE 3

Let's start with a simple Simulated anealing code , and try to find the rosenbrock fucntion optimumum

```
In [170]:
```

```
hide_toggle(for_next=True)
```

Out[170]:

show/hide code next cell

In [399]:

```
import numpy as np
import matplotlib.pyplot as plt
#Created on Fri Jun 7 15:36:40 2019
```

```
#@author: Amine
x0 = 2 # Initial solution we want to start at
y0 = 1
k = 0.1
T0 = 1000
                #initial temperature
M = 300
N = 15
                # number of itterations before temp increase
alpha = 0.85
              # temperature decrease rate (geometric)
z_{int} = 100*(y0-x0**2)**2+(1-x0)**2
print("Initial X is %.3f" % x0)
print("Initial Y is %.3f" % y0)
print("Initial Z is %.3f" % z_int)
temp = []
min_z = []
for i in range(M):
    for j in range(N):
        xt = 0
        yt = 0
        ran_x_1 = np.random.rand()
        ran x 2 = np.random.rand()
        ran_y_1 = np.random.rand()
        ran_y_2 = np.random.rand()
        if ran_x_1 >= 0.5:
            x1 = k*ran_x_2
        else:
            x1 = -k*ran_x_2
        if ran_y_1 >= 0.5:
            y1 = k*ran_y_2
        else:
            y1 = -k*ran_y_2
        xt = x0+x1
        yt = y0+y1
        of new = 100*(yt-xt**2)**2+(1-xt)**2
        of current = 100*(y0-x0**2)**2+(1-x0)**2
        ran 1 = np.random.rand()
        form = 1/(np.exp((of_new-of_current)/T0))
        if of_new <= of_current:</pre>
            x0 = xt
            y0 = yt
        elif ran 1<=form:</pre>
            x0 = xt
            y0 = yt
        else:
            x0 = x0
```

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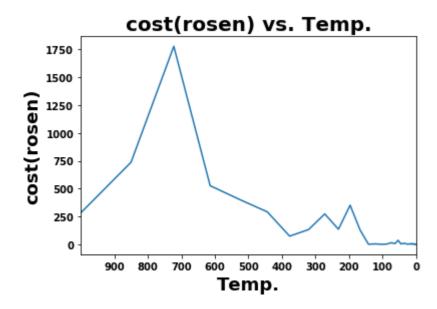
```
temp = np.append(temp,T0)
min_z = np.append(min_z,of_current)
T0 = alpha*T0

print("X is %.3f" % x0)
print("Y is %.3f" % y0)
print("Final OF is %.3f" % of_current)

plt.plot(temp,min_z)
plt.title("cost(rosen) vs. Temp.",fontsize=20, fontweight='bold')
plt.xlabel("Temp.",fontsize=18, fontweight='bold')
plt.ylabel("cost(rosen)",fontsize=18, fontweight='bold')
plt.xlim(1000,0)
plt.xticks(np.arange(min(temp),max(temp),100),fontweight='bold')
plt.yticks(fontweight='bold')
plt.show()
```

```
Initial X is 2.000
Initial Y is 1.000
Initial Z is 901.000
X is 0.995
Y is 0.991
Final OF is 0.000
```

C:\ProgramData\Anaconda3\lib\site-packages\ipykernel_launcher.py:56: Runti
meWarning: divide by zero encountered in double_scalars



Genetic Algorithm

In [169]:

hide_toggle(for_next=True)

Out[169]:

show/hide code next cell

In [50]:

```
import random as rd
    p_c = 1 # probability of crossover (always crossover)
#
    p_m = 0.2 # probability of mutation
#
    K = 3
#
    pop = 160 #population size
    gen = 60
                #number of generations
# Calculate fitness value
XYO = np.array([0,1,0,0,0,1,0,0,1,0,1,1,1,0,1,1,1,0,0,1,0,1,1,0,1,1])
XY_{Encoded_Before} = np.array([0,1,0,0,0,1,0,0,1,0,1,1,1,0,0,1,1,1,0,0,1,1,1,0,1,1])
def objective_value(array,f):
    a X = -5.
    b X = 5.
    1_X = (len(array)//2) \# Length of chromosome X
    a_Y = -5.
    b Y = 5.
    1 Y = (len(array)//2) # Length of chromosome X
    Precision X = (b X-a X)/((2**1 X)-1)
    Precision_Y = (b_Y-a_Y)/((2**1_Y)-1)
    \# [0,1,0,0,0,1,0,0,1,0,1,1,1,0,1,1,1,0,0,1,0,1,1,0,1,1]
    z = 0
    t = 1
    X0 \text{ num } Sum = 0
    for i in range(len(array)//2):
       X0 sum = array[-t]*(2**z)
       X0 \text{ num } Sum = X0 \text{ num } Sum + X0 \text{ sum}
       t = t+1
        z = z+1
    p = 0
    u = 1 + (len(array)//2)
    Y0 \text{ num } Sum = 0
    for j in range(len(array)//2):
        Y0_{sum} = array[-u]*(2**p)
       Y0_num_Sum = Y0_num_Sum + Y0_sum
        u = u+1
        p = p+1
```

```
Decoded X = (X0 \text{ num } Sum*Precision } X)+a X
   Decoded Y = (Y0 \text{ num Sum*Precision } Y)+a Y
   OF So Far = f(Decoded X, Decoded Y)
    return Decoded_X,Decoded_Y,OF_So_Far
def genetic(p_c, p_m,pop,gen,K,f):
   \# x and y, 13 for x and 13 for y
   n list = np.empty((0,len(XY0)))
   for i in range(pop): # Shuffle the elements in the vector n times and store them
       rd.shuffle(XY0)
       n_list = np.vstack((n_list,XY0))
    Final_Best_in_Generation_X = []
    Final Worse in Generation X = []
    For_Plotting_the_Best = np.empty((0,len(XY0)+1))
   One_Final_Guy = np.empty((0,len(XY0)+2))
   One Finel Guy Final = []
   Min for all Generations_for_Mut_1 = np.empty((0,len(XY0)+1))
   Min_for_all_Generations_for_Mut_2 = np.empty((0,len(XY0)+1))
   Min_for_all_Generations_for_Mut_1_1 = np.empty((0,len(XY0)+2))
   Min_for_all_Generations_for_Mut_2_2 = np.empty((0,len(XY0)+2))
   Min_for_all_Generations_for_Mut_1_1_1 = np.empty((0,len(XY0)+2))
   Min_for_all_Generations_for_Mut_2_2_2 = np.empty((0,len(XY0)+2))
    Generation = 1
   for i in range(gen):
       New Population = np.empty((0,len(XY0))) # Saving the new generation
       All in Generation X 1 = np.empty((0,len(XY0)+1))
       All_in_Generation_X_2 = np.empty((0,len(XY0)+1))
       Min in Generation X 1 = []
       Min in Generation X 2 = []
       Save_Best_in_Generation_X = np.empty((0,len(XY0)+1))
       Final Best in Genration X = []
       Final Worst in Genration X = []
       print("--> Generation: #", Generation)
       Family = 1
```

```
for j in range(int(pop/2)): # Range N/2
            print("--> Family: #", Family)
            # Tournament Selection
            Parents = np.empty((0,len(XY0)))
            for i in range(2):
                Battle_Troops = []
                Warrior_1_index = np.random.randint(0,len(n_list)) # e.g. 5
                Warrior 2 index = np.random.randint(0,len(n list))
                Warrior 3 index = np.random.randint(0,len(n list))
                while Warrior_1_index==Warrior 2 index:
                    Warrior_1_index = np.random.randint(0,len(n_list))
                while Warrior_2_index==Warrior_3_index:
                    Warrior 3 index = np.random.randint(0,len(n list))
                while Warrior_1_index==Warrior_3_index:
                    Warrior_3_index = np.random.randint(0,len(n_list))
                Warrior_1 = n_list[Warrior_1_index] # n_list[5]
                Warrior_2 = n_list[Warrior_2_index]
                Warrior 3 = n list[Warrior 3 index]
                Battle Troops = [Warrior 1, Warrior 2, Warrior 3]
                ### Warrior 1
                OF So Far W1 = objective value(Warrior 1,f)[2]
                Prize_Warrior_1 = OF_So_Far_W1
                ### Warrior 2
                OF So Far W2 = objective value(Warrior 2,f)[2]
                Prize Warrior 2 = OF So Far W2
                ### Warrior 3
                OF So Far W3 = objective value(Warrior 3,f)[2]
                Prize Warrior 3 = OF So Far W3
                if Prize_Warrior_1 == min(Prize_Warrior_1,Prize_Warrior_2,Prize_Warrior
_3):
                    Winner = Warrior 1
                    Winner str = "Warrior 1"
                    Prize = Prize Warrior 1
                elif Prize_Warrior_2 == min(Prize_Warrior_1,Prize_Warrior_2,Prize_Warri
or_3):
                    Winner = Warrior 2
                    Winner_str = "Warrior_2"
                    Prize = Prize Warrior 2
                else:
                    Winner = Warrior_3
```

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```
Winner_str = "Warrior_3"
        Prize = Prize Warrior 3
    Parents = np.vstack((Parents, Winner))
Parent_1 = Parents[0,:]
Parent_2 = Parents[1,:]
# Crossover
Child 1 = np.empty((0,len(XY0)))
Child_2 = np.empty((0,len(XY0)))
# Where to crossover
Ran CO 1 = np.random.rand()
if Ran_CO_1 < p_c:</pre>
    Cr_1 = np.random.randint(0,len(XY0))
    Cr_2 = np.random.randint(0,len(XY0))
   while Cr_1 == Cr_2:
        Cr 2 = np.random.randint(0,len(XY0))
    if Cr_1 < Cr_2:
        \# [0,1,0,0,0,1,0,0,1,0,1,1,1,0,1,1,1,0,0,1,0,1,1,0,1,1]
        Mid_Seg_1 = Parent_1[Cr_1:Cr_2+1]
        Mid_Seg_2 = Parent_2[Cr_1:Cr_2+1]
        First_Seg_1 = Parent_1[:Cr_1]
        Last Seg 1 = Parent 1[Cr 2+1:]
        First Seg 2 = Parent 2[:Cr 1]
        Last_Seg_2 = Parent_2[Cr_2+1:]
        Child 1 = np.concatenate((First Seg 1,Mid Seg 2,Last Seg 1))
        Child 2 = np.concatenate((First Seg 2,Mid Seg 1,Last Seg 2))
    else:
        Mid_Seg_1 = Parent_1[Cr_2:Cr_1+1]
        Mid Seg 2 = Parent 2[Cr 2:Cr 1+1]
        First Seg 1 = Parent 1[:Cr 2]
        Last_Seg_1 = Parent_1[Cr_1+1:]
        First_Seg_2 = Parent_2[:Cr_2]
        Last Seg 2 = Parent 2[Cr 1+1:]
        Child_1 = np.concatenate((First_Seg_1,Mid_Seg_2,Last_Seg_1))
        Child 2 = np.concatenate((First Seg 2,Mid Seg 1,Last Seg 2))
```

```
else:
    Child 1 = Parent 1
    Child 2 = Parent 2
# Mutation
# Mutated Child 1
Mutated_Child_1 = []
\# [0,1,0,0,0,1,0,0,1,0,1,1,1,0,1,1,1,0,0,1,0,1,1,0,1,1]
t = 0
for i in Child_1:
    rand_Mut_1 = np.random.rand() # prob. to mutate
    if rand_Mut_1 < p_m:</pre>
        if Child_1[t] == 0:
            Child_1[t] = 1
        else:
            Child_1[t] = 0
        t = t+1
        Mutated Child 1 = Child 1
    else:
        Mutated_Child_1 = Child_1
# Mutated_Child_2
Mutated_Child_2 = []
t = 0
for i in Child 2:
    rand_Mut_2 = np.random.rand() # prob. to mutate
    if rand_Mut_2 < p_m:</pre>
        if Child_2[t] == 0:
            Child 2[t] = 1
        else:
            Child 2[t] = 0
        t = t+1
        Mutated_Child_2 = Child_2
    else:
        Mutated Child 2 = Child 2
# For Mutated 1
OF_So_Far_MC_1 = objective_value(Mutated_Child_1,f)[2]
```

```
# For Mutated 2
            OF_So_Far_MC_2 = objective_value(Mutated_Child_2,f)[2]
            print()
            print("FV at Mutated Child #1 at Generation #",Generation,":",OF_So_Far_MC_
1)
            print("FV at Mutated Child #2 at Generation #",Generation,":",OF_So_Far_MC_
2)
            All_in_Generation_X_1_1_temp = Mutated_Child_1[np.newaxis]
            All_in_Generation_X_1_1 = np.column_stack((OF_So_Far_MC_1,All_in_Generation
_X_1_1_temp))
            All in Generation X 2 1 temp = Mutated Child 2[np.newaxis]
            All_in_Generation_X_2_1 = np.column_stack((OF_So_Far_MC_2,All_in_Generation
_X_2_1_temp))
            All_in_Generation_X_1 = np.vstack((All_in_Generation_X_1,All_in_Generation_
X_1_1)
            All_in_Generation_X_2 = np.vstack((All_in_Generation_X_2,All_in_Generation_
X_2_1)
            Save_Best_in_Generation_X = np.vstack((All_in_Generation_X_1,All_in_Generat
ion_X_2))
            New_Population = np.vstack((New_Population, Mutated_Child_1, Mutated_Child_
2))
            t = 0
            r 1 = []
            for i in All in Generation X 1:
                if(All_in_Generation_X_1[t,:1]) <= min(All_in_Generation_X_1[:,:1]):</pre>
                    r_1 = All_in_Generation_X_1[t,:]
                t = t+1
            Min_in_Generation_X_1 = r_1[np.newaxis]
            t = 0
            r_2 = []
            for i in All in Generation X 2:
                if(All in Generation X 2[t,:1]) <= min(All in Generation X 2[:,:1]):</pre>
                    r_2 = All_in_Generation_X_2[t,:]
                t = t+1
            Min in Generation X 2 = r 2[np.newaxis]
            Family = Family+1
        t = 0
        r final = []
        for i in Save_Best_in_Generation_X:
```

```
if(Save Best in Generation X[t,:1]) <= min(Save Best in Generation X[:,:1]
]):
                r final = Save Best in Generation X[t,]
            t = t+1
        Final_Best_in_Genration_X = r_final[np.newaxis]
        For Plotting the Best = np.vstack((For Plotting the Best, Final Best in Genratio
n X))
        t = 0
        r_2_final = []
        for i in Save Best in Generation X:
            if(Save_Best_in_Generation_X[t,:1]) >= max(Save_Best_in_Generation_X[:,:1
]):
                r_2_final = Save_Best_in_Generation_X[t,]
            t = t+1
        Final_Worst_in_Genration_X = r_2_final[np.newaxis]
        # Elitism
        Darwin_Guy = Final_Best_in_Genration_X[:]
        Not_So_Darwin_Guy = Final_Worst_in_Genration_X[:]
        Darwin_Guy = Darwin_Guy[0:,1:].tolist()
        Not_So_Darwin_Guy = Not_So_Darwin_Guy[0:,1:].tolist()
        Best 1 = np.where((New Population==Darwin Guy).all(axis=1))
        Worst_1 = np.where((New_Population==Not_So_Darwin_Guy).all(axis=1))
        New_Population[Worst_1] = Darwin_Guy
        n list = New Population
        Min_for_all_Generations_for_Mut_1 = np.vstack((Min_for_all_Generations_for_Mut_
1, Min in Generation X 1))
        Min for all Generations for Mut 2 = np.vstack((Min for all Generations for Mut
2,Min in Generation X 2))
        Min for all Generations for Mut 1 1 = np.insert(Min in Generation X 1,0,Generat
ion)
        Min_for_all_Generations_for_Mut_2_2 = np.insert(Min_in_Generation_X_2,0,Generat
ion)
        Min for all Generations for Mut 1 1 1 = np.vstack((Min for all Generations for
Mut_1_1_1,Min_for_all_Generations_for_Mut_1_1))
        Min for all Generations for Mut 2 2 2 = np.vstack((Min for all Generations for
Mut_2_2_2,Min_for_all_Generations_for_Mut_2_2))
```

```
Generation = Generation+1
    One_Final_Guy = np.vstack((Min_for_all_Generations_for_Mut_1_1_1,Min_for_all_Genera
tions_for_Mut_2_2_2))
    t = 0
    Final Here = []
    for i in One Final Guy:
        if(One_Final_Guy[t,1]) <= min (One_Final_Guy[:,1]):</pre>
            Final_Here = One_Final_Guy[t,:]
        t = t+1
    One Final Guy Final = Final Here[np.newaxis]
    print()
    print("Min in all Generation:",One_Final_Guy_Final.tolist())
    print("Min in Cost:",One_Final_Guy_Final[:,1])
    print()
    A = (One_Final_Guy_Final[:,1])
    plt.plot(For_Plotting_the_Best[:,0])
    plt.axhline(y=A,color='r',linestyle='--')
    plt.title("Z Reached Through Generations",fontsize=20,fontweight='bold')
    plt.xlabel("Generations",fontsize=18,fontweight='bold')
    plt.ylabel("Z",fontsize=18,fontweight='bold')
    plt.xticks(fontweight='bold')
    plt.yticks(fontweight='bold')
    xyz = (Generation/4,A)
    xyzz = (Generation/3.7, A+0.5)
    plt.annotate("Minimum Cost Reached at: %0.3f" % A, xy=xyz, xytext=xyzz,
                 arrowprops=dict(facecolor='black',shrink=1,width=1,headwidth=5),
                 fontsize=12,fontweight='bold')
    plt.show()
    # [Generation number, ftness value, 0,1,0,0,0,1,0,0,1,0,1,1,1,0,1,1,1,0,0,1,0,1,1,
0,1,1]
    XYO Encoded After = Final Here[2:]
    # DECODING
    # DECODING
    # DECODING
    Final Solution = objective value(XYO Encoded After,f)
    print()
    print()
    print("X After:",Final_Solution[0])
    print("Y After:",Final_Solution[1])
    print("OF After:",Final Solution[2])
```

Let's apply our algorithm to find the fittest individual on all generations :

In [60]:

```
# Parameters :
# 1  p_c = 1 # probability of crossover (always crossover)
# 2  p_m = 0.2 # probability of mutation
#  K = 3
# 3  pop = 160  #population size
# 4  gen = 60  #number of generations
# Calculate fitness value

##Rosen lambda function
f=lambda x0,y0:100*(y0-x0**2)**2+(1-x0)**2
genetic(1, 0.2,160,60,3,f)
```

--> Generation: # 1 --> Family: # 1 FV at Mutated Child #1 at Generation # 1 : 438.57666396493727 FV at Mutated Child #2 at Generation # 1: 13291.558943070337 --> Family: # 2 FV at Mutated Child #1 at Generation # 1 : 111.79029411243435 FV at Mutated Child #2 at Generation # 1: 8.344798086360129 --> Family: # 3 FV at Mutated Child #1 at Generation # 1: 1110.3666539127464 FV at Mutated Child #2 at Generation # 1: 47.74176576228169 --> Family: # 4 FV at Mutated Child #1 at Generation # 1 : 6399.471199137567 FV at Mutated Child #2 at Generation # 1: 2394.4516782730157 --> Family: # 5 FV at Mutated Child #1 at Generation # 1 : 22.67904441396539 FV at Mutated Child #2 at Generation # 1: 4901.714418508196 --> Family: # 6 FV at Mutated Child #1 at Generation # 1 : 5342.655378315731 FV at Mutated Child #2 at Generation # 1 : 349.8878294406733 --> Family: # 7 FV at Mutated Child #1 at Generation # 1 : 5996.5981570953145 FV at Mutated Child #2 at Generation # 1 : 404.3846225754313 --> Family: # 8 FV at Mutated Child #1 at Generation # 1 : 273.7105428001143 FV at Mutated Child #2 at Generation # 1 : 261.92426283473014 --> Family: # 9 FV at Mutated Child #1 at Generation # 1 : 1753.6359905052836 FV at Mutated Child #2 at Generation # 1: 35.68192557676186 --> Family: # 10 FV at Mutated Child #1 at Generation # 1 : 1108.0222245504513 FV at Mutated Child #2 at Generation # 1 : 20813.850328593107 --> Family: # 11 FV at Mutated Child #1 at Generation # 1 : 158.98112516361203 FV at Mutated Child #2 at Generation # 1 : 351.66644356660896 --> Family: # 12 FV at Mutated Child #1 at Generation # 1 : 25709.407892988434 FV at Mutated Child #2 at Generation # 1: 3206.5111415582783 --> Family: # 13 FV at Mutated Child #1 at Generation # 1: 3399.6087542987243 FV at Mutated Child #2 at Generation # 1 : 2891.55736534522 --> Family: # 14 FV at Mutated Child #1 at Generation # 1 : 42.18069728759552 FV at Mutated Child #2 at Generation # 1 : 9648.621017261741 --> Family: # 15 FV at Mutated Child #1 at Generation # 1 : 664.8680606763131 FV at Mutated Child #2 at Generation # 1 : 191.25653107297865

--> Family: # 16 FV at Mutated Child #1 at Generation # 1 : 3398.8808710493995 FV at Mutated Child #2 at Generation # 1 : 4500.728262746342 --> Family: # 17 FV at Mutated Child #1 at Generation # 1 : 163.72388377145836 FV at Mutated Child #2 at Generation # 1 : 7.110221478054995 --> Family: # 18 FV at Mutated Child #1 at Generation # 1: 109.98349733531074 FV at Mutated Child #2 at Generation # 1 : 505.93150141285577 --> Family: # 19 FV at Mutated Child #1 at Generation # 1 : 710.4711351428116 FV at Mutated Child #2 at Generation # 1 : 1874.8059237199072 --> Family: # 20 FV at Mutated Child #1 at Generation # 1 : 25.86795799345759 FV at Mutated Child #2 at Generation # 1 : 4826.242736523776 --> Family: # 21 FV at Mutated Child #1 at Generation # 1 : 1547.876911341496 FV at Mutated Child #2 at Generation # 1 : 25.25912228802882 --> Family: # 22 FV at Mutated Child #1 at Generation # 1 : 1886.7602740452865 FV at Mutated Child #2 at Generation # 1 : 758.1462624441616 --> Family: # 23 FV at Mutated Child #1 at Generation # 1 : 32443.127894132896 FV at Mutated Child #2 at Generation # 1 : 1921.8842877675377 --> Family: # 24 FV at Mutated Child #1 at Generation # 1: 192.66903368218956 FV at Mutated Child #2 at Generation # 1 : 1200.655840560922 --> Family: # 25 FV at Mutated Child #1 at Generation # 1 : 2734.9043039759063 FV at Mutated Child #2 at Generation # 1 : 5439.751974361618 --> Family: # 26 FV at Mutated Child #1 at Generation # 1 : 2108.847947629091 FV at Mutated Child #2 at Generation # 1 : 12775.235290662831 --> Family: # 27 FV at Mutated Child #1 at Generation # 1: 1390.202869530145 FV at Mutated Child #2 at Generation # 1 : 9162.100463573744 --> Family: # 28 FV at Mutated Child #1 at Generation # 1 : 5784.617214662745 FV at Mutated Child #2 at Generation # 1 : 282.68084212046637 --> Family: # 29 FV at Mutated Child #1 at Generation # 1 : 5.450789778976973 FV at Mutated Child #2 at Generation # 1 : 61.53396158458599 --> Family: # 30 FV at Mutated Child #1 at Generation # 1 : 11027.0980844772 FV at Mutated Child #2 at Generation # 1 : 23.573138428660574

--> Family: # 31

```
FV at Mutated Child #1 at Generation # 1 : 3288.9232701791902
FV at Mutated Child #2 at Generation # 1 : 1603.869793282919
--> Family: # 32
FV at Mutated Child #1 at Generation # 1 : 554.0222245832167
FV at Mutated Child #2 at Generation # 1 : 1846.0886681853233
--> Family: # 33
FV at Mutated Child #1 at Generation # 1: 131.29038545172656
FV at Mutated Child #2 at Generation # 1 : 6.279896781357295
--> Family: # 34
FV at Mutated Child #1 at Generation # 1 : 117.97471044552462
FV at Mutated Child #2 at Generation # 1: 432.67202017143956
--> Family: # 35
FV at Mutated Child #1 at Generation # 1 : 12875.575780392808
FV at Mutated Child #2 at Generation # 1 : 212.93566849062475
--> Family: # 36
FV at Mutated Child #1 at Generation # 1 : 139.10744393604077
FV at Mutated Child #2 at Generation # 1 : 2501.1121479942335
--> Family: # 37
FV at Mutated Child #1 at Generation # 1: 43.956062932155284
FV at Mutated Child #2 at Generation # 1 : 103.2560199108052
--> Family: # 38
FV at Mutated Child #1 at Generation # 1: 103.79006958979735
FV at Mutated Child #2 at Generation # 1 : 111.91748475673867
--> Family: # 39
FV at Mutated Child #1 at Generation # 1 : 13276.081097622578
FV at Mutated Child #2 at Generation # 1 : 72.98850782132037
--> Family: # 40
FV at Mutated Child #1 at Generation # 1: 1252.7129551534667
FV at Mutated Child #2 at Generation # 1 : 2277.056990120718
--> Family: # 41
FV at Mutated Child #1 at Generation # 1: 4997.724669646256
FV at Mutated Child #2 at Generation # 1 : 1445.3715820443192
--> Family: # 42
FV at Mutated Child #1 at Generation # 1 : 2.174985749409764
FV at Mutated Child #2 at Generation # 1 : 9.223245378491336
--> Family: # 43
FV at Mutated Child #1 at Generation # 1 : 27336.804183453754
FV at Mutated Child #2 at Generation # 1 : 2366.0128637158114
--> Family: # 44
FV at Mutated Child #1 at Generation # 1 : 631.4681535425161
FV at Mutated Child #2 at Generation # 1 : 692.5552394113911
--> Family: # 45
FV at Mutated Child #1 at Generation # 1: 865.1195893622835
FV at Mutated Child #2 at Generation # 1 : 88.33144650853126
--> Family: # 46
```

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FV at Mutated Child #1 at Generation # 1 : 161.0819208255861 FV at Mutated Child #2 at Generation # 1 : 499.1967614369847 --> Family: # 47 FV at Mutated Child #1 at Generation # 1 : 1614.7567868846832 FV at Mutated Child #2 at Generation # 1 : 24847.933883230882 --> Family: # 48 FV at Mutated Child #1 at Generation # 1 : 377.4685470920715 FV at Mutated Child #2 at Generation # 1 : 5719.446992635471 --> Family: # 49 FV at Mutated Child #1 at Generation # 1: 2549.979704057595 FV at Mutated Child #2 at Generation # 1 : 11757.15535276976 --> Family: # 50 FV at Mutated Child #1 at Generation # 1: 1341.0694721699497 FV at Mutated Child #2 at Generation # 1 : 3.465538730763645 --> Family: # 51 FV at Mutated Child #1 at Generation # 1 : 63.72549742733017 FV at Mutated Child #2 at Generation # 1: 1752.8730615673107 --> Family: # 52 FV at Mutated Child #1 at Generation # 1: 85.90300336020861 FV at Mutated Child #2 at Generation # 1 : 3739.3134222489543 --> Family: # 53 FV at Mutated Child #1 at Generation # 1 : 1800.0642966492292 FV at Mutated Child #2 at Generation # 1 : 43.116542541344785 --> Family: # 54 FV at Mutated Child #1 at Generation # 1: 1.0898721450216082 FV at Mutated Child #2 at Generation # 1: 291.29658754892085 --> Family: # 55 FV at Mutated Child #1 at Generation # 1 : 260.0267342431612 FV at Mutated Child #2 at Generation # 1: 288.09370333022264 --> Family: # 56 FV at Mutated Child #1 at Generation # 1 : 1028.1177575282131 FV at Mutated Child #2 at Generation # 1 : 5.538670261263822 --> Family: # 57 FV at Mutated Child #1 at Generation # 1 : 2389.9829297795864 FV at Mutated Child #2 at Generation # 1 : 9485.574508621996 --> Family: # 58 FV at Mutated Child #1 at Generation # 1 : 34044.4474504132 FV at Mutated Child #2 at Generation # 1 : 528.2144027869174 --> Family: # 59 FV at Mutated Child #1 at Generation # 1 : 180.0130337437011 FV at Mutated Child #2 at Generation # 1 : 2733.248645661023 --> Family: # 60 FV at Mutated Child #1 at Generation # 1 : 216.7261624548956 FV at Mutated Child #2 at Generation # 1 : 228.37265884741794 --> Family: # 61

FV at Mutated Child #1 at Generation # 1 : 12011.567192763696

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FV at Mutated Child #2 at Generation # 1 : 18072.78330881926 --> Family: # 62 FV at Mutated Child #1 at Generation # 1: 3339.781767965558 FV at Mutated Child #2 at Generation # 1 : 187.87247600988619 --> Family: # 63 FV at Mutated Child #1 at Generation # 1 : 3587.3035557290173 FV at Mutated Child #2 at Generation # 1 : 2416.7300134924812 --> Family: # 64 FV at Mutated Child #1 at Generation # 1 : 292.4031607329214 FV at Mutated Child #2 at Generation # 1: 7673.956757350873 --> Family: # 65 FV at Mutated Child #1 at Generation # 1 : 38807.90651025632 FV at Mutated Child #2 at Generation # 1 : 43910.69831037387 --> Family: # 66 FV at Mutated Child #1 at Generation # 1: 35.580610224061665 FV at Mutated Child #2 at Generation # 1 : 2551.2456148519236 --> Family: # 67 FV at Mutated Child #1 at Generation # 1 : 3581.776999455038 FV at Mutated Child #2 at Generation # 1 : 4.4498937860411765 --> Family: # 68 FV at Mutated Child #1 at Generation # 1 : 16631.773437648208 FV at Mutated Child #2 at Generation # 1 : 73.25973881525768 --> Family: # 69 FV at Mutated Child #1 at Generation # 1: 418.45844832418663 FV at Mutated Child #2 at Generation # 1 : 6381.260895771622 --> Family: # 70 FV at Mutated Child #1 at Generation # 1 : 22.51175820363983 FV at Mutated Child #2 at Generation # 1 : 1028.4494450290686 --> Family: # 71 FV at Mutated Child #1 at Generation # 1 : 1401.8036148132476 FV at Mutated Child #2 at Generation # 1 : 641.6213498134691 --> Family: # 72 FV at Mutated Child #1 at Generation # 1: 3156.2997448782075 FV at Mutated Child #2 at Generation # 1 : 69.11332593890336 --> Family: # 73 FV at Mutated Child #1 at Generation # 1 : 10268.831570264674 FV at Mutated Child #2 at Generation # 1 : 2493.1207185364706 --> Family: # 74 FV at Mutated Child #1 at Generation # 1 : 2173.095286626183 FV at Mutated Child #2 at Generation # 1 : 5703.235392866668 --> Family: # 75 FV at Mutated Child #1 at Generation # 1 : 2852.719979860627 FV at Mutated Child #2 at Generation # 1 : 49392.41271482534 --> Family: # 76 FV at Mutated Child #1 at Generation # 1: 999.4739823183684 FV at Mutated Child #2 at Generation # 1 : 1233.4590474879167

--> Family: # 77 FV at Mutated Child #1 at Generation # 1 : 429.85904227260625 FV at Mutated Child #2 at Generation # 1 : 1384.544513767615 --> Family: # 78 FV at Mutated Child #1 at Generation # 1 : 5835.919244270971 FV at Mutated Child #2 at Generation # 1 : 1026.1656550619957 --> Family: # 79 FV at Mutated Child #1 at Generation # 1: 4543.470875321045 FV at Mutated Child #2 at Generation # 1 : 3248.471668066123 --> Family: # 80 FV at Mutated Child #1 at Generation # 1 : 1414.9252987902546 FV at Mutated Child #2 at Generation # 1: 431.7238153091493 --> Generation: # 2 --> Family: # 1 FV at Mutated Child #1 at Generation # 2 : 400.741607050254 FV at Mutated Child #2 at Generation # 2 : 1337.3809422335205 --> Family: # 2 FV at Mutated Child #1 at Generation # 2 : 321.0017299777128 FV at Mutated Child #2 at Generation # 2 : 1071.816276747909 --> Family: # 3 FV at Mutated Child #1 at Generation # 2 : 5.065025889976882 FV at Mutated Child #2 at Generation # 2 : 129.38427682166642 --> Family: # 4 FV at Mutated Child #1 at Generation # 2 : 10.127292991097448 FV at Mutated Child #2 at Generation # 2 : 274.3541880104426 --> Family: # 5 FV at Mutated Child #1 at Generation # 2 : 2833.96265470774 FV at Mutated Child #2 at Generation # 2 : 11.397329035618624 --> Family: # 6 FV at Mutated Child #1 at Generation # 2 : 7846.949260965652 FV at Mutated Child #2 at Generation # 2 : 57262.4685079876 --> Family: # 7 FV at Mutated Child #1 at Generation # 2 : 18.56513848822152 FV at Mutated Child #2 at Generation # 2 : 502.9117651168358 --> Family: # 8 FV at Mutated Child #1 at Generation # 2 : 22.931225044834914 FV at Mutated Child #2 at Generation # 2 : 293.6139749660277 --> Family: # 9 FV at Mutated Child #1 at Generation # 2 : 1468.1253775179553 FV at Mutated Child #2 at Generation # 2 : 841.301462174331 --> Family: # 10 FV at Mutated Child #1 at Generation # 2 : 1504.1414627857278 FV at Mutated Child #2 at Generation # 2 : 3406.2354346273896 --> Family: # 11 FV at Mutated Child #1 at Generation # 2 : 2334.5558229968306 FV at Mutated Child #2 at Generation # 2 : 196.32749067551123

--> Family: # 12 FV at Mutated Child #1 at Generation # 2 : 4049.655530380144 FV at Mutated Child #2 at Generation # 2 : 1548.3964913693144 --> Family: # 13 FV at Mutated Child #1 at Generation # 2 : 5974.956320162239 FV at Mutated Child #2 at Generation # 2 : 283.0516142261102 --> Family: # 14 FV at Mutated Child #1 at Generation # 2: 63.03745074746544 FV at Mutated Child #2 at Generation # 2 : 2128.753916269754 --> Family: # 15 FV at Mutated Child #1 at Generation # 2 : 0.36734893152986714 FV at Mutated Child #2 at Generation # 2 : 161.34117630368198 --> Family: # 16 FV at Mutated Child #1 at Generation # 2 : 2059.610018937357 FV at Mutated Child #2 at Generation # 2 : 290.62301084639864 --> Family: # 17 FV at Mutated Child #1 at Generation # 2 : 1955.206630646493 FV at Mutated Child #2 at Generation # 2: 3.7999598135755823 --> Family: # 18 FV at Mutated Child #1 at Generation # 2 : 561.4881255683769 FV at Mutated Child #2 at Generation # 2 : 80.57805752712842 --> Family: # 19 FV at Mutated Child #1 at Generation # 2 : 0.2240984430441624 FV at Mutated Child #2 at Generation # 2 : 11.866611832104228 --> Family: # 20 FV at Mutated Child #1 at Generation # 2 : 1082.3016680356452 FV at Mutated Child #2 at Generation # 2 : 48.73799661414183 --> Family: # 21 FV at Mutated Child #1 at Generation # 2 : 676.1672509640115 FV at Mutated Child #2 at Generation # 2 : 605.7948767355242 --> Family: # 22 FV at Mutated Child #1 at Generation # 2 : 2361.3300435507767 FV at Mutated Child #2 at Generation # 2 : 13.563030938313434 --> Family: # 23 FV at Mutated Child #1 at Generation # 2 : 318.0105856961795 FV at Mutated Child #2 at Generation # 2 : 693.4012267606788 --> Family: # 24 FV at Mutated Child #1 at Generation # 2 : 4043.1837286839027 FV at Mutated Child #2 at Generation # 2 : 2474.6914785603085 --> Family: # 25 FV at Mutated Child #1 at Generation # 2 : 28.325039922056554 FV at Mutated Child #2 at Generation # 2 : 258.1721777585763 --> Family: # 26 FV at Mutated Child #1 at Generation # 2 : 4.573683480198678 FV at Mutated Child #2 at Generation # 2 : 33.22331463932391

--> Family: # 27

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FV at Mutated Child #1 at Generation # 2 : 1026.7995242679563
FV at Mutated Child #2 at Generation # 2 : 1131.8575397660957
--> Family: # 28
FV at Mutated Child #1 at Generation # 2: 36897.88594728911
FV at Mutated Child #2 at Generation # 2 : 41758.54127736832
--> Family: # 29
FV at Mutated Child #1 at Generation # 2 : 266.2612639391702
FV at Mutated Child #2 at Generation # 2 : 280.80651820522087
--> Family: # 30
FV at Mutated Child #1 at Generation # 2 : 2422.140263625622
FV at Mutated Child #2 at Generation # 2 : 602.6408241613992
--> Family: # 31
FV at Mutated Child #1 at Generation # 2 : 1366.1412308646295
FV at Mutated Child #2 at Generation # 2 : 1949.2473438188183
--> Family: # 32
FV at Mutated Child #1 at Generation # 2 : 118.19028329951912
FV at Mutated Child #2 at Generation # 2 : 70.38474306133908
--> Family: # 33
FV at Mutated Child #1 at Generation # 2 : 5996.599340045044
FV at Mutated Child #2 at Generation # 2 : 340.6523027682811
--> Family: # 34
FV at Mutated Child #1 at Generation # 2 : 22.67904441396539
FV at Mutated Child #2 at Generation # 2 : 2060.197970836271
--> Family: # 35
FV at Mutated Child #1 at Generation # 2 : 15.034412544985495
FV at Mutated Child #2 at Generation # 2 : 23.64953195622593
--> Family: # 36
FV at Mutated Child #1 at Generation # 2 : 473.9075592957226
FV at Mutated Child #2 at Generation # 2 : 1905.5079385894635
--> Family: # 37
FV at Mutated Child #1 at Generation # 2 : 206.47074777816613
FV at Mutated Child #2 at Generation # 2 : 6.697366039022495
--> Family: # 38
FV at Mutated Child #1 at Generation # 2 : 8.28434465384157
FV at Mutated Child #2 at Generation # 2 : 428.47838743987955
--> Family: # 39
FV at Mutated Child #1 at Generation # 2 : 382.87507477651457
FV at Mutated Child #2 at Generation # 2 : 32.47216057137029
--> Family: # 40
FV at Mutated Child #1 at Generation # 2 : 30563.895270840894
FV at Mutated Child #2 at Generation # 2 : 53814.99133075844
--> Family: # 41
FV at Mutated Child #1 at Generation # 2 : 3857.879284604929
FV at Mutated Child #2 at Generation # 2 : 5601.053729396734
--> Family: # 42
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FV at Mutated Child #1 at Generation # 2 : 14.242334883091441 FV at Mutated Child #2 at Generation # 2 : 3871.2134478067924 --> Family: # 43 FV at Mutated Child #1 at Generation # 2 : 82297.05611636097 FV at Mutated Child #2 at Generation # 2 : 16868.310980470902 --> Family: # 44 FV at Mutated Child #1 at Generation # 2 : 0.49813372791657606 FV at Mutated Child #2 at Generation # 2 : 87.66749937861927 --> Family: # 45 FV at Mutated Child #1 at Generation # 2 : 1326.4541671137767 FV at Mutated Child #2 at Generation # 2 : 934.3720008727521 --> Family: # 46 FV at Mutated Child #1 at Generation # 2 : 7130.768571294132 FV at Mutated Child #2 at Generation # 2 : 5753.3296725013415 --> Family: # 47 FV at Mutated Child #1 at Generation # 2 : 36.83680573259452 FV at Mutated Child #2 at Generation # 2 : 1290.355716532287 --> Family: # 48 FV at Mutated Child #1 at Generation # 2 : 346.17239858335927 FV at Mutated Child #2 at Generation # 2 : 549.6968358362765 --> Family: # 49 FV at Mutated Child #1 at Generation # 2 : 2.8363388042951327 FV at Mutated Child #2 at Generation # 2 : 6.633503969921332 --> Family: # 50 FV at Mutated Child #1 at Generation # 2 : 1463.0580950431056 FV at Mutated Child #2 at Generation # 2 : 1016.5567518769795 --> Family: # 51 FV at Mutated Child #1 at Generation # 2 : 2204.99153162828 FV at Mutated Child #2 at Generation # 2: 3179.2484329015883 --> Family: # 52 FV at Mutated Child #1 at Generation # 2 : 2759.7432550328886 FV at Mutated Child #2 at Generation # 2 : 1609.905716058662 --> Family: # 53 FV at Mutated Child #1 at Generation # 2 : 1961.6207407661543 FV at Mutated Child #2 at Generation # 2 : 42.6277482944085 --> Family: # 54 FV at Mutated Child #1 at Generation # 2 : 51.32949288029384 FV at Mutated Child #2 at Generation # 2 : 2469.934199113361 --> Family: # 55 FV at Mutated Child #1 at Generation # 2: 983.3567043897634 FV at Mutated Child #2 at Generation # 2 : 552.1406843605337 --> Family: # 56 FV at Mutated Child #1 at Generation # 2 : 536.0078283282242 FV at Mutated Child #2 at Generation # 2 : 238.4078909038199 --> Family: # 57

FV at Mutated Child #1 at Generation # 2 : 887.85182193291

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FV at Mutated Child #2 at Generation # 2 : 1338.37572438694 --> Family: # 58 FV at Mutated Child #1 at Generation # 2 : 34.109781348653975 FV at Mutated Child #2 at Generation # 2 : 2780.408920637319 --> Family: # 59 FV at Mutated Child #1 at Generation # 2 : 42.4377882526976 FV at Mutated Child #2 at Generation # 2 : 76.81584960282105 --> Family: # 60 FV at Mutated Child #1 at Generation # 2 : 5.29785682138049 FV at Mutated Child #2 at Generation # 2: 67.33347309611653 --> Family: # 61 FV at Mutated Child #1 at Generation # 2: 484.65956549999794 FV at Mutated Child #2 at Generation # 2 : 2588.4647118962143 --> Family: # 62 FV at Mutated Child #1 at Generation # 2 : 308.97801309547447 FV at Mutated Child #2 at Generation # 2 : 438.3574885187855 --> Family: # 63 FV at Mutated Child #1 at Generation # 2 : 87.319535402797 FV at Mutated Child #2 at Generation # 2 : 177.5093455813001 --> Family: # 64 FV at Mutated Child #1 at Generation # 2 : 75.84167450488789 FV at Mutated Child #2 at Generation # 2: 490.58566536232746 --> Family: # 65 FV at Mutated Child #1 at Generation # 2 : 560.7644238328027 FV at Mutated Child #2 at Generation # 2 : 1026.3549146017203 --> Family: # 66 FV at Mutated Child #1 at Generation # 2: 376.56373926612065 FV at Mutated Child #2 at Generation # 2 : 8.198931701692116 --> Family: # 67 FV at Mutated Child #1 at Generation # 2 : 129.82847635998206 FV at Mutated Child #2 at Generation # 2 : 200.2419272470112 --> Family: # 68 FV at Mutated Child #1 at Generation # 2: 332.26092775664085 FV at Mutated Child #2 at Generation # 2 : 2162.383926935482 --> Family: # 69 FV at Mutated Child #1 at Generation # 2 : 293.6139749660277 FV at Mutated Child #2 at Generation # 2 : 284.09640544619174 --> Family: # 70 FV at Mutated Child #1 at Generation # 2 : 989.1078486511594 FV at Mutated Child #2 at Generation # 2 : 525.5943978555366 --> Family: # 71 FV at Mutated Child #1 at Generation # 2 : 5671.635794058645 FV at Mutated Child #2 at Generation # 2 : 5194.097965079843 --> Family: # 72 FV at Mutated Child #1 at Generation # 2 : 7.297018471691718 FV at Mutated Child #2 at Generation # 2 : 5.020774763417642

--> Family: # 73 FV at Mutated Child #1 at Generation # 2 : 510.3851295061545 FV at Mutated Child #2 at Generation # 2 : 248.77562029673047 --> Family: # 74 FV at Mutated Child #1 at Generation # 2 : 950.8097821619953 FV at Mutated Child #2 at Generation # 2 : 1256.199325403513 --> Family: # 75 FV at Mutated Child #1 at Generation # 2 : 268.23370446327806 FV at Mutated Child #2 at Generation # 2 : 487.2422048082468 --> Family: # 76 FV at Mutated Child #1 at Generation # 2 : 1067.0797036542945 FV at Mutated Child #2 at Generation # 2 : 173.67656165228323 --> Family: # 77 FV at Mutated Child #1 at Generation # 2 : 1311.2296007338657 FV at Mutated Child #2 at Generation # 2 : 1350.2702038174868 --> Family: # 78 FV at Mutated Child #1 at Generation # 2 : 22.50062878343814 FV at Mutated Child #2 at Generation # 2: 482.30809214435595 --> Family: # 79 FV at Mutated Child #1 at Generation # 2 : 21.36028756927127 FV at Mutated Child #2 at Generation # 2 : 24.153313008341588 --> Family: # 80 FV at Mutated Child #1 at Generation # 2 : 220.36495983486893 FV at Mutated Child #2 at Generation # 2 : 37.76443932586498 --> Generation: # 3 --> Family: # 1 FV at Mutated Child #1 at Generation # 3: 478.70428859192884 FV at Mutated Child #2 at Generation # 3: 121.68379903675755 --> Family: # 2 FV at Mutated Child #1 at Generation # 3 : 110.43739373967583 FV at Mutated Child #2 at Generation # 3: 122.42504006834413 --> Family: # 3 FV at Mutated Child #1 at Generation # 3: 24.504600184461165 FV at Mutated Child #2 at Generation # 3 : 199.73171981574993 --> Family: # 4 FV at Mutated Child #1 at Generation # 3 : 846.158830965028 FV at Mutated Child #2 at Generation # 3: 14.981870852321066 --> Family: # 5 FV at Mutated Child #1 at Generation # 3: 432.8540782621686 FV at Mutated Child #2 at Generation # 3: 392.4093095616846 --> Family: # 6 FV at Mutated Child #1 at Generation # 3 : 443.6677115154606 FV at Mutated Child #2 at Generation # 3 : 799.883366206212 --> Family: # 7 FV at Mutated Child #1 at Generation # 3 : 54.260911911142124 FV at Mutated Child #2 at Generation # 3: 29.916935609670862

--> Family: # 8 FV at Mutated Child #1 at Generation # 3 : 474.58565153281154 FV at Mutated Child #2 at Generation # 3 : 717.3530752024267 --> Family: # 9 FV at Mutated Child #1 at Generation # 3 : 1044.2450999091382 FV at Mutated Child #2 at Generation # 3 : 21.46466630272224 --> Family: # 10 FV at Mutated Child #1 at Generation # 3: 480.1938360321778 FV at Mutated Child #2 at Generation # 3 : 425.8574905797056 --> Family: # 11 FV at Mutated Child #1 at Generation # 3 : 2146.8009697635844 FV at Mutated Child #2 at Generation # 3: 2112.453443794284 --> Family: # 12 FV at Mutated Child #1 at Generation # 3 : 90.05382717078243 FV at Mutated Child #2 at Generation # 3: 834.7807631638451 --> Family: # 13 FV at Mutated Child #1 at Generation # 3: 355.09066087900385 FV at Mutated Child #2 at Generation # 3 : 669.3827201174054 --> Family: # 14 FV at Mutated Child #1 at Generation # 3 : 430.4655666630775 FV at Mutated Child #2 at Generation # 3: 393.14126896099464 --> Family: # 15 FV at Mutated Child #1 at Generation # 3 : 36.86404299658655 FV at Mutated Child #2 at Generation # 3: 465.28727474919316 --> Family: # 16 FV at Mutated Child #1 at Generation # 3: 36.77137836626604 FV at Mutated Child #2 at Generation # 3: 1266.7355286835605 --> Family: # 17 FV at Mutated Child #1 at Generation # 3 : 1072.3963260814985 FV at Mutated Child #2 at Generation # 3 : 3.4077667501604902 --> Family: # 18 FV at Mutated Child #1 at Generation # 3 : 3917.8101674106742 FV at Mutated Child #2 at Generation # 3 : 3022.1425177199444 --> Family: # 19 FV at Mutated Child #1 at Generation # 3 : 2589.2408717922744 FV at Mutated Child #2 at Generation # 3 : 1595.0195424656495 --> Family: # 20 FV at Mutated Child #1 at Generation # 3 : 378.6661224312731 FV at Mutated Child #2 at Generation # 3 : 772.9646490174513 --> Family: # 21 FV at Mutated Child #1 at Generation # 3 : 656.3491082353972 FV at Mutated Child #2 at Generation # 3 : 3137.5657867376804 --> Family: # 22 FV at Mutated Child #1 at Generation # 3 : 126.78346116890084 FV at Mutated Child #2 at Generation # 3 : 160.59533808101958

--> Family: # 23

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FV at Mutated Child #1 at Generation # 3: 902.2745134416976
FV at Mutated Child #2 at Generation # 3 : 6764.48632112265
--> Family: # 24
FV at Mutated Child #1 at Generation # 3: 778.0022387470626
FV at Mutated Child #2 at Generation # 3 : 57.94365372691199
--> Family: # 25
FV at Mutated Child #1 at Generation # 3 : 335.4643562575967
FV at Mutated Child #2 at Generation # 3: 285.2575795598447
--> Family: # 26
FV at Mutated Child #1 at Generation # 3: 199.72822337478047
FV at Mutated Child #2 at Generation # 3 : 9.669186640372391
--> Family: # 27
FV at Mutated Child #1 at Generation # 3 : 2813.2511022473914
FV at Mutated Child #2 at Generation # 3 : 3776.056513307642
--> Family: # 28
FV at Mutated Child #1 at Generation # 3 : 68.1035814795184
FV at Mutated Child #2 at Generation # 3 : 3442.263636198162
--> Family: # 29
FV at Mutated Child #1 at Generation # 3 : 775.09029955916
FV at Mutated Child #2 at Generation # 3: 47.093541177625355
--> Family: # 30
FV at Mutated Child #1 at Generation # 3: 221.72276997926969
FV at Mutated Child #2 at Generation # 3 : 3.620318800174567
--> Family: # 31
FV at Mutated Child #1 at Generation # 3 : 860.6659090367926
FV at Mutated Child #2 at Generation # 3: 241.61173984586438
--> Family: # 32
FV at Mutated Child #1 at Generation # 3: 21.903853540382816
FV at Mutated Child #2 at Generation # 3: 1518.1885314626707
--> Family: # 33
FV at Mutated Child #1 at Generation # 3: 33.33947882962166
FV at Mutated Child #2 at Generation # 3 : 765.0268447718179
--> Family: # 34
FV at Mutated Child #1 at Generation # 3 : 114.62545582854898
FV at Mutated Child #2 at Generation # 3 : 438.139632243354
--> Family: # 35
FV at Mutated Child #1 at Generation # 3 : 611.4443818413458
FV at Mutated Child #2 at Generation # 3 : 25.59075090893662
--> Family: # 36
FV at Mutated Child #1 at Generation # 3 : 676.6173219071973
FV at Mutated Child #2 at Generation # 3 : 1971.376241653881
--> Family: # 37
FV at Mutated Child #1 at Generation # 3 : 4.22976850402149
FV at Mutated Child #2 at Generation # 3 : 2.326153899832494
--> Family: # 38
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FV at Mutated Child #1 at Generation # 3 : 31.932769710566287 FV at Mutated Child #2 at Generation # 3 : 221.3646630648785 --> Family: # 39 FV at Mutated Child #1 at Generation # 3 : 604.6060367616277 FV at Mutated Child #2 at Generation # 3: 473.91916870561477 --> Family: # 40 FV at Mutated Child #1 at Generation # 3 : 6.746233268719906 FV at Mutated Child #2 at Generation # 3 : 1.6307248620410264 --> Family: # 41 FV at Mutated Child #1 at Generation # 3 : 551.6489794111242 FV at Mutated Child #2 at Generation # 3: 1274.1366851154496 --> Family: # 42 FV at Mutated Child #1 at Generation # 3: 1308.7753108132301 FV at Mutated Child #2 at Generation # 3 : 1016.2208509256844 --> Family: # 43 FV at Mutated Child #1 at Generation # 3: 2280.0251050955594 FV at Mutated Child #2 at Generation # 3: 803.8986616997805 --> Family: # 44 FV at Mutated Child #1 at Generation # 3 : 16.44132880865967 FV at Mutated Child #2 at Generation # 3 : 154.95741767692445 --> Family: # 45 FV at Mutated Child #1 at Generation # 3: 7.953776322891171 FV at Mutated Child #2 at Generation # 3: 61.631621556950435 --> Family: # 46 FV at Mutated Child #1 at Generation # 3 : 60.54378142847256 FV at Mutated Child #2 at Generation # 3 : 1002.386643140784 --> Family: # 47 FV at Mutated Child #1 at Generation # 3 : 2110.738016685064 FV at Mutated Child #2 at Generation # 3: 1037.5133286107268 --> Family: # 48 FV at Mutated Child #1 at Generation # 3: 4.428704524646183 FV at Mutated Child #2 at Generation # 3 : 196.27276242708075 --> Family: # 49 FV at Mutated Child #1 at Generation # 3: 17.761907133041156 FV at Mutated Child #2 at Generation # 3 : 166.36711725779173 --> Family: # 50 FV at Mutated Child #1 at Generation # 3 : 153.70172646691265 FV at Mutated Child #2 at Generation # 3 : 13.729715669636427 --> Family: # 51 FV at Mutated Child #1 at Generation # 3 : 1099.0617152845184 FV at Mutated Child #2 at Generation # 3 : 201.02138835381777 --> Family: # 52 FV at Mutated Child #1 at Generation # 3: 480.83423389577115 FV at Mutated Child #2 at Generation # 3 : 49.81680305637816 --> Family: # 53

FV at Mutated Child #1 at Generation # 3 : 111.8539340945769

FV at Mutated Child #2 at Generation # 3 : 431.7210360494178 --> Family: # 54 FV at Mutated Child #1 at Generation # 3: 539.0608262346868 FV at Mutated Child #2 at Generation # 3: 4244.724732004816 --> Family: # 55 FV at Mutated Child #1 at Generation # 3 : 178.0507329728109 FV at Mutated Child #2 at Generation # 3: 0.007026102139009082 --> Family: # 56 FV at Mutated Child #1 at Generation # 3 : 237.7995231904204 FV at Mutated Child #2 at Generation # 3: 2440.151992376258 --> Family: # 57 FV at Mutated Child #1 at Generation # 3: 793.4184072155286 FV at Mutated Child #2 at Generation # 3 : 301.8976605981964 --> Family: # 58 FV at Mutated Child #1 at Generation # 3: 10.751945911568118 FV at Mutated Child #2 at Generation # 3 : 29.48232997909073 --> Family: # 59 FV at Mutated Child #1 at Generation # 3: 4481.863750465195 FV at Mutated Child #2 at Generation # 3: 206.24620182720759 --> Family: # 60 FV at Mutated Child #1 at Generation # 3: 101.6728920395716 FV at Mutated Child #2 at Generation # 3: 877.4451480660842 --> Family: # 61 FV at Mutated Child #1 at Generation # 3 : 14.89473090511961 FV at Mutated Child #2 at Generation # 3: 219.19539305667206 --> Family: # 62 FV at Mutated Child #1 at Generation # 3 : 6.983263293844153 FV at Mutated Child #2 at Generation # 3: 11.872404028369239 --> Family: # 63 FV at Mutated Child #1 at Generation # 3: 92.70824385021741 FV at Mutated Child #2 at Generation #3: 43.903309860512806 --> Family: # 64 FV at Mutated Child #1 at Generation # 3: 150.92776476358736 FV at Mutated Child #2 at Generation # 3 : 4.943382186191423 --> Family: # 65 FV at Mutated Child #1 at Generation # 3 : 1684.4307351211928 FV at Mutated Child #2 at Generation # 3 : 10.417679609645702 --> Family: # 66 FV at Mutated Child #1 at Generation # 3 : 100.34022805981124 FV at Mutated Child #2 at Generation # 3 : 19.09623861826805 --> Family: # 67 FV at Mutated Child #1 at Generation # 3 : 26.17907018251349 FV at Mutated Child #2 at Generation # 3 : 103.20361709096451 --> Family: # 68 FV at Mutated Child #1 at Generation # 3 : 213.66175276091266 FV at Mutated Child #2 at Generation # 3: 24.492308495028116

--> Family: # 69 FV at Mutated Child #1 at Generation # 3 : 19.560368460346766 FV at Mutated Child #2 at Generation # 3: 1995.0987134138832 --> Family: # 70 FV at Mutated Child #1 at Generation # 3 : 1562.305630560854 FV at Mutated Child #2 at Generation # 3 : 654.7164559878688 --> Family: # 71 FV at Mutated Child #1 at Generation # 3 : 1184.2110938174774 FV at Mutated Child #2 at Generation # 3: 1266.2477945744401 --> Family: # 72 FV at Mutated Child #1 at Generation # 3 : 25.85736052002581 FV at Mutated Child #2 at Generation # 3: 105.78762793257678 --> Family: # 73 FV at Mutated Child #1 at Generation # 3 : 454.1410380272305 FV at Mutated Child #2 at Generation # 3: 1217.7818839108788 --> Family: # 74 FV at Mutated Child #1 at Generation # 3 : 328.7363879471167 FV at Mutated Child #2 at Generation # 3: 46071.56633470698 --> Family: # 75 FV at Mutated Child #1 at Generation # 3: 89.17836535988019 FV at Mutated Child #2 at Generation # 3: 215.02508051512757 --> Family: # 76 FV at Mutated Child #1 at Generation # 3 : 346.1820939621054 FV at Mutated Child #2 at Generation # 3: 211.72994732116388 --> Family: # 77 FV at Mutated Child #1 at Generation # 3: 2902.619585777001 FV at Mutated Child #2 at Generation # 3: 2879.3615751172583 --> Family: # 78 FV at Mutated Child #1 at Generation # 3 : 2351.6151975196854 FV at Mutated Child #2 at Generation # 3 : 253.958268920372 --> Family: # 79 FV at Mutated Child #1 at Generation # 3 : 23.690311995438712 FV at Mutated Child #2 at Generation # 3 : 57.28187207506065 --> Family: # 80 FV at Mutated Child #1 at Generation # 3: 313.3822727130134 FV at Mutated Child #2 at Generation # 3 : 537.1592164043406 --> Generation: # 4 --> Family: # 1 FV at Mutated Child #1 at Generation # 4: 89.63875814292057 FV at Mutated Child #2 at Generation # 4: 61.49654091107215 --> Family: # 2 FV at Mutated Child #1 at Generation # 4 : 498.6437069962546 FV at Mutated Child #2 at Generation # 4 : 34.50258948207728 --> Family: # 3 FV at Mutated Child #1 at Generation # 4: 305.55403829524266

FV at Mutated Child #2 at Generation # 4 : 298.7633231261604

--> Family: # 4 FV at Mutated Child #1 at Generation # 4 : 2531.4782422048424 FV at Mutated Child #2 at Generation # 4 : 661.655596506358 --> Family: # 5 FV at Mutated Child #1 at Generation # 4 : 94.85954678991219 FV at Mutated Child #2 at Generation # 4 : 66.4839726578739 --> Family: # 6 FV at Mutated Child #1 at Generation # 4: 0.10026250526401 FV at Mutated Child #2 at Generation # 4 : 5.812075648752923 --> Family: # 7 FV at Mutated Child #1 at Generation # 4 : 18.54353661470506 FV at Mutated Child #2 at Generation # 4 : 541.8616473397963 --> Family: # 8 FV at Mutated Child #1 at Generation # 4 : 21.33239001594438 FV at Mutated Child #2 at Generation # 4: 23.168656697777894 --> Family: # 9 FV at Mutated Child #1 at Generation # 4 : 280.2010432480985 FV at Mutated Child #2 at Generation # 4: 3.0355127076657404 --> Family: # 10 FV at Mutated Child #1 at Generation # 4: 43763.422612448325 FV at Mutated Child #2 at Generation # 4 : 23426.801607018297 --> Family: # 11 FV at Mutated Child #1 at Generation # 4 : 76.81584960282105 FV at Mutated Child #2 at Generation # 4 : 116.69451785994862 --> Family: # 12 FV at Mutated Child #1 at Generation # 4 : 518.8187208025483 FV at Mutated Child #2 at Generation # 4: 35.82697803659936 --> Family: # 13 FV at Mutated Child #1 at Generation # 4 : 5.276090077440399 FV at Mutated Child #2 at Generation # 4: 864.9438830558325 --> Family: # 14 FV at Mutated Child #1 at Generation # 4 : 16.44132880865967 FV at Mutated Child #2 at Generation # 4 : 36.77137836626604 --> Family: # 15 FV at Mutated Child #1 at Generation # 4: 26.251318479018757 FV at Mutated Child #2 at Generation # 4 : 5.455808040802322 --> Family: # 16 FV at Mutated Child #1 at Generation # 4 : 456.7123104821844 FV at Mutated Child #2 at Generation # 4 : 43.278020352979325 --> Family: # 17 FV at Mutated Child #1 at Generation # 4 : 66.9053821926682 FV at Mutated Child #2 at Generation # 4 : 449.3649260220815 --> Family: # 18 FV at Mutated Child #1 at Generation # 4 : 8.214397474287322 FV at Mutated Child #2 at Generation # 4 : 333.4589277302185

--> Family: # 19

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FV at Mutated Child #1 at Generation # 4: 307.24325687671796
FV at Mutated Child #2 at Generation # 4 : 148.4225803247878
--> Family: # 20
FV at Mutated Child #1 at Generation # 4: 60.816516950887085
FV at Mutated Child #2 at Generation # 4 : 92.44590660342065
--> Family: # 21
FV at Mutated Child #1 at Generation # 4 : 293.6139749660277
FV at Mutated Child #2 at Generation # 4 : 326.3840592535402
--> Family: # 22
FV at Mutated Child #1 at Generation # 4 : 340.7233052184816
FV at Mutated Child #2 at Generation # 4 : 189.3531126920179
--> Family: # 23
FV at Mutated Child #1 at Generation # 4 : 6.452958987722789
FV at Mutated Child #2 at Generation # 4 : 21.878996807999524
--> Family: # 24
FV at Mutated Child #1 at Generation # 4: 287.2174709333116
FV at Mutated Child #2 at Generation # 4 : 852.7711178139892
--> Family: # 25
FV at Mutated Child #1 at Generation # 4 : 1524.6616298890544
FV at Mutated Child #2 at Generation # 4: 1713.4391056720633
--> Family: # 26
FV at Mutated Child #1 at Generation # 4 : 4.793769440031798
FV at Mutated Child #2 at Generation # 4 : 410.8697547619105
--> Family: # 27
FV at Mutated Child #1 at Generation # 4: 2138.0559845913594
FV at Mutated Child #2 at Generation # 4: 1305.5819454943016
--> Family: # 28
FV at Mutated Child #1 at Generation # 4 : 1011.7287633777828
FV at Mutated Child #2 at Generation # 4 : 7.21469546420025
--> Family: # 29
FV at Mutated Child #1 at Generation # 4: 1845.413945454604
FV at Mutated Child #2 at Generation # 4 : 1092.9238991467967
--> Family: # 30
FV at Mutated Child #1 at Generation # 4: 348.43256333230477
FV at Mutated Child #2 at Generation # 4 : 161.75621732139527
--> Family: # 31
FV at Mutated Child #1 at Generation # 4 : 1738.3807440862308
FV at Mutated Child #2 at Generation # 4 : 285.99875894985394
--> Family: # 32
FV at Mutated Child #1 at Generation # 4 : 286.35866357972844
FV at Mutated Child #2 at Generation # 4: 338.09137964841614
--> Family: # 33
FV at Mutated Child #1 at Generation # 4: 147.2230191442859
FV at Mutated Child #2 at Generation # 4 : 1625.38562224395
--> Family: # 34
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FV at Mutated Child #1 at Generation # 4 : 4.736787121028136 FV at Mutated Child #2 at Generation # 4 : 5.857674002433193 --> Family: # 35 FV at Mutated Child #1 at Generation # 4: 47641.11680094552 FV at Mutated Child #2 at Generation # 4 : 57774.31843741168 --> Family: # 36 FV at Mutated Child #1 at Generation # 4: 300.3059208518553 FV at Mutated Child #2 at Generation # 4 : 640.4042885365346 --> Family: # 37 FV at Mutated Child #1 at Generation # 4: 940.281359908638 FV at Mutated Child #2 at Generation # 4 : 5.850753941946154 --> Family: # 38 FV at Mutated Child #1 at Generation # 4: 139.14984150999754 FV at Mutated Child #2 at Generation # 4 : 19.637243959864684 --> Family: # 39 FV at Mutated Child #1 at Generation # 4 : 371.637016548954 FV at Mutated Child #2 at Generation # 4 : 519.0705749902248 --> Family: # 40 FV at Mutated Child #1 at Generation # 4 : 78.5700121508534 FV at Mutated Child #2 at Generation # 4 : 88.87736003338999 --> Family: # 41 FV at Mutated Child #1 at Generation # 4: 0.27620138886569895 FV at Mutated Child #2 at Generation # 4 : 138.60195626413795 --> Family: # 42 FV at Mutated Child #1 at Generation # 4: 675.6754554158073 FV at Mutated Child #2 at Generation # 4 : 526.711479511555 --> Family: # 43 FV at Mutated Child #1 at Generation # 4 : 1496.1024152897628 FV at Mutated Child #2 at Generation # 4 : 9.606903000254992 --> Family: # 44 FV at Mutated Child #1 at Generation # 4: 0.6950288695609275 FV at Mutated Child #2 at Generation # 4 : 1273.467265249449 --> Family: # 45 FV at Mutated Child #1 at Generation # 4 : 602.6560277165275 FV at Mutated Child #2 at Generation # 4 : 2023.1066121565304 --> Family: # 46 FV at Mutated Child #1 at Generation # 4 : 606.8395301483271 FV at Mutated Child #2 at Generation # 4 : 62.69427591207023 --> Family: # 47 FV at Mutated Child #1 at Generation # 4 : 2.907880655561497 FV at Mutated Child #2 at Generation # 4 : 7.499045998423212 --> Family: # 48 FV at Mutated Child #1 at Generation # 4 : 208.229486861484 FV at Mutated Child #2 at Generation # 4 : 30.17181428231724 --> Family: # 49

FV at Mutated Child #1 at Generation # 4 : 3.945292092035577

FV at Mutated Child #2 at Generation # 4 : 124.69173357298293 --> Family: # 50 FV at Mutated Child #1 at Generation # 4: 101.99672040541856 FV at Mutated Child #2 at Generation # 4 : 251.0391650315851 --> Family: # 51 FV at Mutated Child #1 at Generation # 4 : 65.38590729072413 FV at Mutated Child #2 at Generation # 4 : 72.3928712991577 --> Family: # 52 FV at Mutated Child #1 at Generation # 4 : 421.03119488528836 FV at Mutated Child #2 at Generation # 4: 244.77433344299004 --> Family: # 53 FV at Mutated Child #1 at Generation # 4: 466.4129556841865 FV at Mutated Child #2 at Generation # 4 : 540.5965848617695 --> Family: # 54 FV at Mutated Child #1 at Generation # 4: 18.600797124512514 FV at Mutated Child #2 at Generation # 4 : 0.5495874077183556 --> Family: # 55 FV at Mutated Child #1 at Generation # 4 : 69.3905494056732 FV at Mutated Child #2 at Generation # 4 : 14.89473090511961 --> Family: # 56 FV at Mutated Child #1 at Generation # 4: 272.01366278549284 FV at Mutated Child #2 at Generation # 4 : 238.7452145728709 --> Family: # 57 FV at Mutated Child #1 at Generation # 4: 32.665834223639344 FV at Mutated Child #2 at Generation # 4 : 1.411874875364972 --> Family: # 58 FV at Mutated Child #1 at Generation # 4 : 74.46594398416626 FV at Mutated Child #2 at Generation # 4 : 71.72990076908886 --> Family: # 59 FV at Mutated Child #1 at Generation # 4: 830.8710665840309 FV at Mutated Child #2 at Generation # 4: 82.21768959426801 --> Family: # 60 FV at Mutated Child #1 at Generation # 4: 362.67186560006223 FV at Mutated Child #2 at Generation # 4 : 87.2665922829916 --> Family: # 61 FV at Mutated Child #1 at Generation # 4 : 108.6298623001618 FV at Mutated Child #2 at Generation # 4 : 202.43320305693052 --> Family: # 62 FV at Mutated Child #1 at Generation # 4 : 1150.4074462761653 FV at Mutated Child #2 at Generation # 4 : 2301.847412122876 --> Family: # 63 FV at Mutated Child #1 at Generation # 4 : 12.233116840466206 FV at Mutated Child #2 at Generation # 4 : 143.87886252935192 --> Family: # 64 FV at Mutated Child #1 at Generation # 4 : 3.38365667606631 FV at Mutated Child #2 at Generation # 4 : 4.585220949181351

--> Family: # 65 FV at Mutated Child #1 at Generation # 4 : 13.280654344875217 FV at Mutated Child #2 at Generation #4: 115.06621119998852 --> Family: # 66 FV at Mutated Child #1 at Generation # 4 : 441.80496766084565 FV at Mutated Child #2 at Generation # 4 : 1253.7576796549015 --> Family: # 67 FV at Mutated Child #1 at Generation # 4: 138.9612466876816 FV at Mutated Child #2 at Generation # 4 : 238.05761870673962 --> Family: # 68 FV at Mutated Child #1 at Generation # 4 : 148.394984817626 FV at Mutated Child #2 at Generation # 4: 442.02181773115893 --> Family: # 69 FV at Mutated Child #1 at Generation # 4 : 4.5494617113703075 FV at Mutated Child #2 at Generation # 4: 155.45154859767644 --> Family: # 70 FV at Mutated Child #1 at Generation # 4: 1.5273636420161334 FV at Mutated Child #2 at Generation # 4 : 9.77097530155415 --> Family: # 71 FV at Mutated Child #1 at Generation # 4 : 56.443488557612355 FV at Mutated Child #2 at Generation # 4 : 55.680937060402336 --> Family: # 72 FV at Mutated Child #1 at Generation # 4 : 295.44622344399124 FV at Mutated Child #2 at Generation # 4 : 276.3200221902368 --> Family: # 73 FV at Mutated Child #1 at Generation # 4: 14.567795073179948 FV at Mutated Child #2 at Generation # 4: 19.352133411243084 --> Family: # 74 FV at Mutated Child #1 at Generation # 4 : 5.390347311426847 FV at Mutated Child #2 at Generation # 4 : 75.73568231516423 --> Family: # 75 FV at Mutated Child #1 at Generation # 4 : 181.40392074406734 FV at Mutated Child #2 at Generation # 4 : 716.6870406577744 --> Family: # 76 FV at Mutated Child #1 at Generation # 4: 2004.0173816797947 FV at Mutated Child #2 at Generation # 4 : 72.29999297477843 --> Family: # 77 FV at Mutated Child #1 at Generation # 4 : 2771.33157070023 FV at Mutated Child #2 at Generation # 4 : 1625.607465773432 --> Family: # 78 FV at Mutated Child #1 at Generation # 4: 12.92114950866634 FV at Mutated Child #2 at Generation # 4 : 35.44845660929186 --> Family: # 79 FV at Mutated Child #1 at Generation # 4 : 193.3459158447874

--> Family: # 80

FV at Mutated Child #2 at Generation # 4: 98.16717784922834

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FV at Mutated Child #1 at Generation # 4: 0.7716196406106104
FV at Mutated Child #2 at Generation # 4 : 184.88819500723056
--> Generation: # 5
--> Family: # 1
FV at Mutated Child #1 at Generation # 5 : 275.065891096545
FV at Mutated Child #2 at Generation # 5 : 158.48226159276638
--> Family: # 2
FV at Mutated Child #1 at Generation # 5 : 1210.9638606921712
FV at Mutated Child #2 at Generation # 5 : 214.98623827228374
--> Family: # 3
FV at Mutated Child #1 at Generation # 5 : 24.377919981732713
FV at Mutated Child #2 at Generation # 5 : 86.07384670149102
--> Family: # 4
FV at Mutated Child #1 at Generation # 5 : 210.64326657446466
FV at Mutated Child #2 at Generation # 5 : 25.04165141431231
--> Family: # 5
FV at Mutated Child #1 at Generation # 5 : 163.53333481785123
FV at Mutated Child #2 at Generation # 5 : 32.024134785542365
--> Family: # 6
FV at Mutated Child #1 at Generation # 5 : 869.5101937845719
FV at Mutated Child #2 at Generation # 5 : 138.61429391441234
--> Family: # 7
FV at Mutated Child #1 at Generation # 5 : 1985.2677795836553
FV at Mutated Child #2 at Generation # 5 : 1437.5717913231877
--> Family: # 8
FV at Mutated Child #1 at Generation # 5 : 26.601591037587855
FV at Mutated Child #2 at Generation # 5 : 38.68090022440906
--> Family: # 9
FV at Mutated Child #1 at Generation # 5 : 62.58180169379689
FV at Mutated Child #2 at Generation # 5 : 148.704648746013
--> Family: # 10
FV at Mutated Child #1 at Generation # 5 : 40.35325579625425
FV at Mutated Child #2 at Generation # 5 : 25.385264407463396
--> Family: # 11
FV at Mutated Child #1 at Generation # 5 : 18.77072409147338
FV at Mutated Child #2 at Generation # 5 : 29.927358430227017
--> Family: # 12
FV at Mutated Child #1 at Generation # 5 : 8.264149109366627
FV at Mutated Child #2 at Generation # 5 : 23.986062030806423
--> Family: # 13
FV at Mutated Child #1 at Generation # 5 : 295.85866450258425
FV at Mutated Child #2 at Generation # 5 : 50.98361943266985
--> Family: # 14
FV at Mutated Child #1 at Generation # 5 : 699.310993636059
FV at Mutated Child #2 at Generation # 5 : 82.6151585055086
--> Family: # 15
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FV at Mutated Child #1 at Generation # 5 : 66.93839051901321
FV at Mutated Child #2 at Generation # 5 : 314.965421256255
--> Family: # 16
FV at Mutated Child #1 at Generation # 5 : 24941.832924773415
FV at Mutated Child #2 at Generation # 5 : 41897.865542427164
--> Family: # 17
FV at Mutated Child #1 at Generation # 5 : 271.224762571209
FV at Mutated Child #2 at Generation # 5 : 2.5131826668694814
--> Family: # 18
FV at Mutated Child #1 at Generation # 5 : 157.8597883835608
FV at Mutated Child #2 at Generation # 5 : 13.578894650914584
--> Family: # 19
FV at Mutated Child #1 at Generation # 5 : 82.93923197094847
FV at Mutated Child #2 at Generation # 5 : 15.664297971135333
--> Family: # 20
FV at Mutated Child #1 at Generation # 5 : 39008.00120985539
FV at Mutated Child #2 at Generation # 5 : 19338.40975487083
--> Family: # 21
FV at Mutated Child #1 at Generation # 5 : 104.2170475510419
FV at Mutated Child #2 at Generation # 5 : 28.85543412610006
--> Family: # 22
FV at Mutated Child #1 at Generation # 5 : 1174.5042290212193
FV at Mutated Child #2 at Generation # 5 : 347.22390405074134
--> Family: # 23
FV at Mutated Child #1 at Generation # 5 : 54.29951737883069
FV at Mutated Child #2 at Generation # 5 : 5.785157422031941
--> Family: # 24
FV at Mutated Child #1 at Generation # 5 : 98.58275778959018
FV at Mutated Child #2 at Generation # 5 : 1.8901205043543396
--> Family: # 25
FV at Mutated Child #1 at Generation # 5 : 1.9175685307851524
FV at Mutated Child #2 at Generation # 5 : 439.80356006865236
--> Family: # 26
FV at Mutated Child #1 at Generation # 5 : 22.135861431281217
FV at Mutated Child #2 at Generation # 5 : 11.249252474312497
--> Family: # 27
FV at Mutated Child #1 at Generation # 5 : 76.71287983115154
FV at Mutated Child #2 at Generation # 5 : 93.80700861981161
--> Family: # 28
FV at Mutated Child #1 at Generation # 5 : 198.04535737044094
FV at Mutated Child #2 at Generation # 5 : 28.898482054031128
--> Family: # 29
FV at Mutated Child #1 at Generation # 5 : 0.3643183170755513
FV at Mutated Child #2 at Generation # 5 : 49.46621667461937
--> Family: # 30
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FV at Mutated Child #1 at Generation # 5 : 241.1764230427785 FV at Mutated Child #2 at Generation # 5 : 7.388502030294434 --> Family: # 31 FV at Mutated Child #1 at Generation # 5 : 22.72578118458624 FV at Mutated Child #2 at Generation # 5 : 224.58754720464478 --> Family: # 32 FV at Mutated Child #1 at Generation # 5 : 108.92776565579753 FV at Mutated Child #2 at Generation # 5 : 245.19748521493005 --> Family: # 33 FV at Mutated Child #1 at Generation # 5 : 2164.45628893408 FV at Mutated Child #2 at Generation # 5 : 2054.78668707775 --> Family: # 34 FV at Mutated Child #1 at Generation # 5 : 484.8011628528801 FV at Mutated Child #2 at Generation # 5 : 15.614529415370425 --> Family: # 35 FV at Mutated Child #1 at Generation # 5 : 7.638649298788055 FV at Mutated Child #2 at Generation # 5 : 982.6502452534559 --> Family: # 36 FV at Mutated Child #1 at Generation # 5 : 16.207151287108164 FV at Mutated Child #2 at Generation # 5 : 35.19193209557471 --> Family: # 37 FV at Mutated Child #1 at Generation # 5 : 779.9346404229703 FV at Mutated Child #2 at Generation # 5 : 3126.0359461573053 --> Family: # 38 FV at Mutated Child #1 at Generation # 5 : 227.30455723612747 FV at Mutated Child #2 at Generation # 5 : 803.325926963647 --> Family: # 39 FV at Mutated Child #1 at Generation # 5 : 194.87239804045626 FV at Mutated Child #2 at Generation # 5 : 43.12130291012074 --> Family: # 40 FV at Mutated Child #1 at Generation # 5 : 45.49336662486692 FV at Mutated Child #2 at Generation # 5 : 266.5623502451122 --> Family: # 41 FV at Mutated Child #1 at Generation # 5 : 179.04519584265452 FV at Mutated Child #2 at Generation # 5 : 135.70301685701062 --> Family: # 42 FV at Mutated Child #1 at Generation # 5 : 161.18924720917664 FV at Mutated Child #2 at Generation # 5 : 56.353859367497904 --> Family: # 43 FV at Mutated Child #1 at Generation # 5 : 63.15134455133726 FV at Mutated Child #2 at Generation # 5 : 15.05927821978593 --> Family: # 44 FV at Mutated Child #1 at Generation # 5 : 77.30938695944619 FV at Mutated Child #2 at Generation # 5 : 719.1751036921852 --> Family: # 45

FV at Mutated Child #1 at Generation # 5 : 448.0168151006837

FV at Mutated Child #2 at Generation # 5 : 378.17183353489617 --> Family: # 46 FV at Mutated Child #1 at Generation # 5 : 493.9599883953429 FV at Mutated Child #2 at Generation # 5 : 164.69772350226032 --> Family: # 47 FV at Mutated Child #1 at Generation # 5 : 218.04052829273024 FV at Mutated Child #2 at Generation # 5 : 22.530407485226313 --> Family: # 48 FV at Mutated Child #1 at Generation # 5 : 4.918614402619854 FV at Mutated Child #2 at Generation # 5 : 2.896021695614826 --> Family: # 49 FV at Mutated Child #1 at Generation # 5 : 14.121081311250899 FV at Mutated Child #2 at Generation # 5 : 11.097035967488033 --> Family: # 50 FV at Mutated Child #1 at Generation # 5 : 959.7166750179034 FV at Mutated Child #2 at Generation # 5 : 52.28294321182795 --> Family: # 51 FV at Mutated Child #1 at Generation # 5 : 57.11199055696373 FV at Mutated Child #2 at Generation # 5 : 6.542998527940073 --> Family: # 52 FV at Mutated Child #1 at Generation # 5 : 639.469808437549 FV at Mutated Child #2 at Generation # 5 : 106.28999847823944 --> Family: # 53 FV at Mutated Child #1 at Generation # 5 : 55.020337154563855 FV at Mutated Child #2 at Generation # 5 : 10.051312226273955 --> Family: # 54 FV at Mutated Child #1 at Generation # 5 : 2.0966876145156625 FV at Mutated Child #2 at Generation # 5 : 353.1023131112048 --> Family: # 55 FV at Mutated Child #1 at Generation # 5 : 119.70034510695274 FV at Mutated Child #2 at Generation # 5 : 49.425497864444374 --> Family: # 56 FV at Mutated Child #1 at Generation # 5 : 172.88231940392043 FV at Mutated Child #2 at Generation # 5 : 2682.8621996572997 --> Family: # 57 FV at Mutated Child #1 at Generation # 5 : 1620.2052706848117 FV at Mutated Child #2 at Generation # 5 : 1707.5117476103649 --> Family: # 58 FV at Mutated Child #1 at Generation # 5 : 13.1877317910119 FV at Mutated Child #2 at Generation # 5 : 25.983378315793136 --> Family: # 59 FV at Mutated Child #1 at Generation # 5 : 72.85820663090585 FV at Mutated Child #2 at Generation # 5 : 4.167933434172473 --> Family: # 60 FV at Mutated Child #1 at Generation # 5 : 495.535236752362 FV at Mutated Child #2 at Generation # 5 : 10.640610867149494

--> Family: # 61 FV at Mutated Child #1 at Generation # 5 : 624.8506739999552 FV at Mutated Child #2 at Generation # 5 : 1418.668216916552 --> Family: # 62 FV at Mutated Child #1 at Generation # 5 : 77.11126014643692 FV at Mutated Child #2 at Generation # 5 : 64.88214099262814 --> Family: # 63 FV at Mutated Child #1 at Generation # 5 : 35.55559141925166 FV at Mutated Child #2 at Generation # 5 : 322.2095043368992 --> Family: # 64 FV at Mutated Child #1 at Generation # 5 : 717.3030402895236 FV at Mutated Child #2 at Generation # 5 : 33.59363333934842 --> Family: # 65 FV at Mutated Child #1 at Generation # 5 : 270.45470399151003 FV at Mutated Child #2 at Generation # 5 : 99.8029661467151 --> Family: # 66 FV at Mutated Child #1 at Generation # 5 : 44904.06086181429 FV at Mutated Child #2 at Generation # 5 : 52926.86779574239 --> Family: # 67 FV at Mutated Child #1 at Generation # 5 : 1022.9035616361755 FV at Mutated Child #2 at Generation # 5 : 687.8881291820147 --> Family: # 68 FV at Mutated Child #1 at Generation # 5 : 58.08097788193509 FV at Mutated Child #2 at Generation # 5 : 25.192869220487932 --> Family: # 69 FV at Mutated Child #1 at Generation # 5 : 121.79257779192795 FV at Mutated Child #2 at Generation # 5 : 74.03938795645621 --> Family: # 70 FV at Mutated Child #1 at Generation # 5 : 14.258931871749128 FV at Mutated Child #2 at Generation # 5 : 54.932365568256635 --> Family: # 71 FV at Mutated Child #1 at Generation # 5 : 6.8399262906134926 FV at Mutated Child #2 at Generation # 5 : 0.1514510364534472 --> Family: # 72 FV at Mutated Child #1 at Generation # 5 : 0.6412339378529074 FV at Mutated Child #2 at Generation # 5 : 796.7530447953585 --> Family: # 73 FV at Mutated Child #1 at Generation # 5 : 105.53688980374072 FV at Mutated Child #2 at Generation # 5 : 2619.111789420816 --> Family: # 74 FV at Mutated Child #1 at Generation # 5 : 1183.9768878363311 FV at Mutated Child #2 at Generation # 5 : 144.7366377670391 --> Family: # 75 FV at Mutated Child #1 at Generation # 5 : 9.77097530155415 FV at Mutated Child #2 at Generation # 5 : 70.13255875421066

--> Family: # 76

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FV at Mutated Child #1 at Generation # 5 : 58.69597907245635
FV at Mutated Child #2 at Generation # 5 : 13.11285242025072
--> Family: # 77
FV at Mutated Child #1 at Generation # 5 : 1531.6105746551034
FV at Mutated Child #2 at Generation # 5 : 572.0791893534932
--> Family: # 78
FV at Mutated Child #1 at Generation # 5 : 54.42490133877028
FV at Mutated Child #2 at Generation # 5 : 124.23232443233749
--> Family: # 79
FV at Mutated Child #1 at Generation # 5 : 44.11006645833649
FV at Mutated Child #2 at Generation # 5 : 0.10026250526401
--> Family: # 80
FV at Mutated Child #1 at Generation # 5 : 55.62981875300354
FV at Mutated Child #2 at Generation # 5 : 1494.2814352115874
--> Generation: # 6
--> Family: # 1
FV at Mutated Child #1 at Generation # 6 : 2.5965669659534534
FV at Mutated Child #2 at Generation # 6 : 494.6869315784216
--> Family: # 2
FV at Mutated Child #1 at Generation # 6 : 67.22447303253628
FV at Mutated Child #2 at Generation # 6 : 161.63491548170154
--> Family: # 3
FV at Mutated Child #1 at Generation # 6 : 235.44732088302197
FV at Mutated Child #2 at Generation # 6 : 5.649008288608699
--> Family: # 4
FV at Mutated Child #1 at Generation # 6: 238.79570058610653
FV at Mutated Child #2 at Generation # 6 : 452.8446622731478
--> Family: # 5
FV at Mutated Child #1 at Generation # 6 : 10.477417061484417
FV at Mutated Child #2 at Generation # 6 : 2.5302698558791206
--> Family: # 6
FV at Mutated Child #1 at Generation # 6 : 3.3899714262955083
FV at Mutated Child #2 at Generation # 6 : 68.80786587638308
--> Family: # 7
FV at Mutated Child #1 at Generation # 6 : 2.304549503818496
FV at Mutated Child #2 at Generation # 6 : 195.85472183362106
--> Family: # 8
FV at Mutated Child #1 at Generation # 6 : 1.1990275909137222
FV at Mutated Child #2 at Generation # 6: 0.5322679200101443
--> Family: # 9
FV at Mutated Child #1 at Generation # 6 : 14.196816737060121
FV at Mutated Child #2 at Generation # 6 : 1.0171108274470129
--> Family: # 10
FV at Mutated Child #1 at Generation # 6 : 4.750568960337419
FV at Mutated Child #2 at Generation # 6 : 92.86709040866955
--> Family: # 11
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FV at Mutated Child #1 at Generation # 6 : 10.16546022345948
FV at Mutated Child #2 at Generation # 6 : 0.7363795991230101
--> Family: # 12
FV at Mutated Child #1 at Generation # 6 : 72.02308632949331
FV at Mutated Child #2 at Generation # 6 : 111.48979142743909
--> Family: # 13
FV at Mutated Child #1 at Generation # 6: 45.842349778092924
FV at Mutated Child #2 at Generation # 6: 25.012562575354988
--> Family: # 14
FV at Mutated Child #1 at Generation # 6: 1.3827577708202508
FV at Mutated Child #2 at Generation # 6 : 117.318319517481
--> Family: # 15
FV at Mutated Child #1 at Generation # 6 : 1.9101620282825365
FV at Mutated Child #2 at Generation # 6 : 0.6278596592108778
--> Family: # 16
FV at Mutated Child #1 at Generation # 6: 16.275410138526947
FV at Mutated Child #2 at Generation # 6: 1.3029495732902472
--> Family: # 17
FV at Mutated Child #1 at Generation # 6: 13.145928338658642
FV at Mutated Child #2 at Generation # 6 : 2.180705986914513
--> Family: # 18
FV at Mutated Child #1 at Generation # 6 : 3.4903745779591073
FV at Mutated Child #2 at Generation # 6 : 145.91757920821266
--> Family: # 19
FV at Mutated Child #1 at Generation # 6 : 82.0039727335685
FV at Mutated Child #2 at Generation # 6: 18.582700812316816
--> Family: # 20
FV at Mutated Child #1 at Generation # 6 : 585.9764568922566
FV at Mutated Child #2 at Generation # 6 : 2452.259823909556
--> Family: # 21
FV at Mutated Child #1 at Generation # 6: 25.79472579637987
FV at Mutated Child #2 at Generation # 6 : 3.077418352876114
--> Family: # 22
FV at Mutated Child #1 at Generation # 6: 0.5158846088642551
FV at Mutated Child #2 at Generation # 6 : 4.184326285435361
--> Family: # 23
FV at Mutated Child #1 at Generation # 6 : 255.36851055958726
FV at Mutated Child #2 at Generation # 6 : 580.2075952722934
--> Family: # 24
FV at Mutated Child #1 at Generation # 6: 0.8863103126188919
FV at Mutated Child #2 at Generation # 6 : 3.2091579984417433
--> Family: # 25
FV at Mutated Child #1 at Generation # 6: 41.71991327736165
FV at Mutated Child #2 at Generation # 6 : 9.863339161105305
--> Family: # 26
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FV at Mutated Child #1 at Generation # 6 : 18.941850207657065 FV at Mutated Child #2 at Generation # 6 : 11.996181687518204 --> Family: # 27 FV at Mutated Child #1 at Generation # 6 : 5.404722991372855 FV at Mutated Child #2 at Generation # 6: 90.31308338534622 --> Family: # 28 FV at Mutated Child #1 at Generation # 6 : 144.60534352706648 FV at Mutated Child #2 at Generation # 6 : 26.66279973075229 --> Family: # 29 FV at Mutated Child #1 at Generation # 6: 457.5493369452418 FV at Mutated Child #2 at Generation # 6 : 26.453689653253953 --> Family: # 30 FV at Mutated Child #1 at Generation # 6 : 254.1435547202289 FV at Mutated Child #2 at Generation # 6 : 11.736218648269379 --> Family: # 31 FV at Mutated Child #1 at Generation # 6 : 24.630110810352463 FV at Mutated Child #2 at Generation # 6 : 138.0547216606621 --> Family: # 32 FV at Mutated Child #1 at Generation # 6 : 25.120198075226185 FV at Mutated Child #2 at Generation # 6 : 4.976426362271109 --> Family: # 33 FV at Mutated Child #1 at Generation # 6 : 53.16897787570243 FV at Mutated Child #2 at Generation # 6: 11.799825298607477 --> Family: # 34 FV at Mutated Child #1 at Generation # 6 : 534.3483431417603 FV at Mutated Child #2 at Generation # 6 : 2519.8491193910113 --> Family: # 35 FV at Mutated Child #1 at Generation # 6 : 5.112362721933826 FV at Mutated Child #2 at Generation # 6: 1.9101620282825365 --> Family: # 36 FV at Mutated Child #1 at Generation # 6: 0.5787056158513803 FV at Mutated Child #2 at Generation # 6 : 482.0754995027079 --> Family: # 37 FV at Mutated Child #1 at Generation # 6 : 5.46137039490019 FV at Mutated Child #2 at Generation # 6 : 4.666230645651234 --> Family: # 38 FV at Mutated Child #1 at Generation # 6 : 88.7441957237486 FV at Mutated Child #2 at Generation # 6 : 129.5509021359736 --> Family: # 39 FV at Mutated Child #1 at Generation # 6 : 22.935121783403176 FV at Mutated Child #2 at Generation # 6 : 11.568789811229315 --> Family: # 40 FV at Mutated Child #1 at Generation # 6 : 2.954912159255654 FV at Mutated Child #2 at Generation # 6 : 554.4828110250548 --> Family: # 41

FV at Mutated Child #1 at Generation # 6 : 17.430861769353267

FV at Mutated Child #2 at Generation # 6 : 207.2959355497256 --> Family: # 42 FV at Mutated Child #1 at Generation # 6 : 126.65299586472035 FV at Mutated Child #2 at Generation # 6 : 27.69248649954216 --> Family: # 43 FV at Mutated Child #1 at Generation # 6 : 18.852529877884994 FV at Mutated Child #2 at Generation # 6 : 4.661658210153042 --> Family: # 44 FV at Mutated Child #1 at Generation # 6 : 264.4153476949748 FV at Mutated Child #2 at Generation # 6 : 52.10045991102414 --> Family: # 45 FV at Mutated Child #1 at Generation # 6: 219.48750013740639 FV at Mutated Child #2 at Generation # 6: 299.22975099975713 --> Family: # 46 FV at Mutated Child #1 at Generation # 6: 119.60048719271371 FV at Mutated Child #2 at Generation # 6 : 17.77721900394945 --> Family: # 47 FV at Mutated Child #1 at Generation # 6: 1.9324057844401001 FV at Mutated Child #2 at Generation # 6 : 8.237354278149521 --> Family: # 48 FV at Mutated Child #1 at Generation # 6: 2112.8439638975537 FV at Mutated Child #2 at Generation # 6 : 2293.05359859205 --> Family: # 49 FV at Mutated Child #1 at Generation # 6 : 1.8447175226248138 FV at Mutated Child #2 at Generation # 6 : 1.5693002464802939 --> Family: # 50 FV at Mutated Child #1 at Generation # 6 : 159.42826920786158 FV at Mutated Child #2 at Generation # 6 : 49.0667230891374 --> Family: # 51 FV at Mutated Child #1 at Generation # 6 : 1.7460977803500608 FV at Mutated Child #2 at Generation # 6 : 337.4924012742939 --> Family: # 52 FV at Mutated Child #1 at Generation # 6: 0.8265518543328263 FV at Mutated Child #2 at Generation # 6 : 5.569346440557252 --> Family: # 53 FV at Mutated Child #1 at Generation # 6 : 30.113551079206903 FV at Mutated Child #2 at Generation # 6 : 23.986062030806423 --> Family: # 54 FV at Mutated Child #1 at Generation # 6 : 189.90345938416172 FV at Mutated Child #2 at Generation # 6 : 296.1856966869913 --> Family: # 55 FV at Mutated Child #1 at Generation # 6 : 14.20716404396173 FV at Mutated Child #2 at Generation # 6 : 78.22888285387133 --> Family: # 56 FV at Mutated Child #1 at Generation # 6 : 19.066852992094788 FV at Mutated Child #2 at Generation # 6 : 51.959253976760756

--> Family: # 57 FV at Mutated Child #1 at Generation # 6 : 2.9642528802833303 FV at Mutated Child #2 at Generation # 6: 63.36888923756077 --> Family: # 58 FV at Mutated Child #1 at Generation # 6 : 611.831868640669 FV at Mutated Child #2 at Generation # 6 : 3650.1377401104146 --> Family: # 59 FV at Mutated Child #1 at Generation # 6: 44.239014550704795 FV at Mutated Child #2 at Generation # 6 : 78.85865589640561 --> Family: # 60 FV at Mutated Child #1 at Generation # 6 : 29.164637378094397 FV at Mutated Child #2 at Generation # 6 : 6.032750567602306 --> Family: # 61 FV at Mutated Child #1 at Generation # 6 : 39.653286650509195 FV at Mutated Child #2 at Generation # 6 : 17.29028460171503 --> Family: # 62 FV at Mutated Child #1 at Generation # 6 : 38.85387134190074 FV at Mutated Child #2 at Generation # 6: 15.757457204083682 --> Family: # 63 FV at Mutated Child #1 at Generation # 6: 399.50943902303266 FV at Mutated Child #2 at Generation # 6 : 5.686994174604294 --> Family: # 64 FV at Mutated Child #1 at Generation # 6 : 102.60966113939477 FV at Mutated Child #2 at Generation # 6 : 24.109775791397052 --> Family: # 65 FV at Mutated Child #1 at Generation # 6: 2071.1623940941995 FV at Mutated Child #2 at Generation # 6: 1987.9634077606406 --> Family: # 66 FV at Mutated Child #1 at Generation # 6 : 113.28682102058306 FV at Mutated Child #2 at Generation # 6 : 47.16341570756331 --> Family: # 67 FV at Mutated Child #1 at Generation # 6 : 2.2086481130767 FV at Mutated Child #2 at Generation # 6 : 2.3777367164092955 --> Family: # 68 FV at Mutated Child #1 at Generation # 6 : 6.438967310205688 FV at Mutated Child #2 at Generation # 6 : 1.89212826365056 --> Family: # 69 FV at Mutated Child #1 at Generation # 6 : 267.0524552825416 FV at Mutated Child #2 at Generation # 6 : 71.35916488648856 --> Family: # 70 FV at Mutated Child #1 at Generation # 6 : 122.65891494555838 FV at Mutated Child #2 at Generation # 6 : 221.2694330064276 --> Family: # 71 FV at Mutated Child #1 at Generation # 6 : 35.23900174031198 FV at Mutated Child #2 at Generation # 6 : 57.965135980154315

--> Family: # 72

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FV at Mutated Child #1 at Generation # 6 : 1.7927888587135068
FV at Mutated Child #2 at Generation # 6 : 16.18924346489551
--> Family: # 73
FV at Mutated Child #1 at Generation # 6: 4.311276968249663
FV at Mutated Child #2 at Generation # 6 : 2.1650140950025762
--> Family: # 74
FV at Mutated Child #1 at Generation # 6 : 33424.936077060076
FV at Mutated Child #2 at Generation # 6: 47071.75726739477
--> Family: # 75
FV at Mutated Child #1 at Generation # 6: 639.1836782651344
FV at Mutated Child #2 at Generation # 6 : 2.4265263757258393
--> Family: # 76
FV at Mutated Child #1 at Generation # 6 : 123.01267322464183
FV at Mutated Child #2 at Generation # 6 : 202.0350061691432
--> Family: # 77
FV at Mutated Child #1 at Generation # 6: 15.205900036308854
FV at Mutated Child #2 at Generation # 6 : 151.65540988070327
--> Family: # 78
FV at Mutated Child #1 at Generation # 6: 81.82080967932272
FV at Mutated Child #2 at Generation # 6 : 1.508129374164219
--> Family: # 79
FV at Mutated Child #1 at Generation # 6: 17.521244127228865
FV at Mutated Child #2 at Generation # 6 : 1402.8005812682063
--> Family: # 80
FV at Mutated Child #1 at Generation # 6: 17.279241916446853
FV at Mutated Child #2 at Generation # 6: 0.8554568410024234
--> Generation: # 7
--> Family: # 1
FV at Mutated Child #1 at Generation # 7 : 253.958268920372
FV at Mutated Child #2 at Generation # 7 : 1.0081176323584835
--> Family: # 2
FV at Mutated Child #1 at Generation # 7 : 23.048588806819982
FV at Mutated Child #2 at Generation # 7 : 29.054733757487476
--> Family: # 3
FV at Mutated Child #1 at Generation # 7: 93.33893394760365
FV at Mutated Child #2 at Generation # 7 : 38.70535484151347
--> Family: # 4
FV at Mutated Child #1 at Generation # 7 : 12.641850779854233
FV at Mutated Child #2 at Generation # 7 : 42.47555266934647
--> Family: # 5
FV at Mutated Child #1 at Generation # 7 : 56.08864157413081
FV at Mutated Child #2 at Generation # 7 : 2437.117818964207
--> Family: # 6
FV at Mutated Child #1 at Generation # 7 : 37.6719031269325
FV at Mutated Child #2 at Generation # 7 : 18.073096972439593
--> Family: # 7
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FV at Mutated Child #1 at Generation # 7: 8.371032271342688
FV at Mutated Child #2 at Generation # 7 : 121.19406436326621
--> Family: # 8
FV at Mutated Child #1 at Generation # 7 : 24.5860585883645
FV at Mutated Child #2 at Generation # 7 : 2489.8821017767177
--> Family: # 9
FV at Mutated Child #1 at Generation # 7: 1.6832225668173482
FV at Mutated Child #2 at Generation # 7 : 589.6058402736168
--> Family: # 10
FV at Mutated Child #1 at Generation # 7 : 612.6912710482454
FV at Mutated Child #2 at Generation # 7 : 9.58166184371771
--> Family: # 11
FV at Mutated Child #1 at Generation # 7 : 9.993554962287515
FV at Mutated Child #2 at Generation # 7 : 4.325480480876785
--> Family: # 12
FV at Mutated Child #1 at Generation # 7: 413.7821380473488
FV at Mutated Child #2 at Generation # 7 : 128.3169910132595
--> Family: # 13
FV at Mutated Child #1 at Generation # 7 : 30.48063295258712
FV at Mutated Child #2 at Generation # 7: 273.46923346996357
--> Family: # 14
FV at Mutated Child #1 at Generation # 7 : 572.2667220759413
FV at Mutated Child #2 at Generation # 7 : 10.626895545854497
--> Family: # 15
FV at Mutated Child #1 at Generation # 7: 11.124741595126432
FV at Mutated Child #2 at Generation # 7: 1.8639506777204677
--> Family: # 16
FV at Mutated Child #1 at Generation # 7 : 5.68515553867232
FV at Mutated Child #2 at Generation # 7 : 38.69332562582478
--> Family: # 17
FV at Mutated Child #1 at Generation # 7 : 23.008408231164267
FV at Mutated Child #2 at Generation # 7 : 142.83832981547707
--> Family: # 18
FV at Mutated Child #1 at Generation # 7 : 41.78401431385942
FV at Mutated Child #2 at Generation # 7 : 218.96201879774836
--> Family: # 19
FV at Mutated Child #1 at Generation # 7 : 3.150158800573569
FV at Mutated Child #2 at Generation # 7 : 559.2279397646236
--> Family: # 20
FV at Mutated Child #1 at Generation # 7: 111.30557992962213
FV at Mutated Child #2 at Generation # 7 : 136.91378188581524
--> Family: # 21
FV at Mutated Child #1 at Generation # 7: 43.776297683303774
FV at Mutated Child #2 at Generation # 7 : 13.496632012192746
--> Family: # 22
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FV at Mutated Child #1 at Generation # 7 : 6.771439896840917 FV at Mutated Child #2 at Generation # 7 : 18.238116040170482 --> Family: # 23 FV at Mutated Child #1 at Generation # 7 : 3.420894320639168 FV at Mutated Child #2 at Generation # 7 : 35.499670902503006 --> Family: # 24 FV at Mutated Child #1 at Generation # 7 : 663.0636568952831 FV at Mutated Child #2 at Generation # 7 : 92.03414783743291 --> Family: # 25 FV at Mutated Child #1 at Generation # 7 : 122.62258252934106 FV at Mutated Child #2 at Generation # 7 : 119.87919399305733 --> Family: # 26 FV at Mutated Child #1 at Generation # 7: 21.972719467497512 FV at Mutated Child #2 at Generation # 7 : 2365.8055780409304 --> Family: # 27 FV at Mutated Child #1 at Generation # 7 : 1.284007413936602 FV at Mutated Child #2 at Generation # 7: 81.95464104415018 --> Family: # 28 FV at Mutated Child #1 at Generation # 7 : 62.51755717311771 FV at Mutated Child #2 at Generation # 7 : 16.76304991145521 --> Family: # 29 FV at Mutated Child #1 at Generation # 7 : 168.0778777495977 FV at Mutated Child #2 at Generation # 7 : 103.93963029003353 --> Family: # 30 FV at Mutated Child #1 at Generation # 7: 10.544203809207326 FV at Mutated Child #2 at Generation # 7 : 6.276198453745333 --> Family: # 31 FV at Mutated Child #1 at Generation # 7 : 40.89217049259942 FV at Mutated Child #2 at Generation # 7: 20.708375426772644 --> Family: # 32 FV at Mutated Child #1 at Generation # 7 : 17.164139621901782 FV at Mutated Child #2 at Generation # 7 : 184.08088633050045 --> Family: # 33 FV at Mutated Child #1 at Generation # 7 : 3.9477700065095798 FV at Mutated Child #2 at Generation # 7 : 10.903142027823403 --> Family: # 34 FV at Mutated Child #1 at Generation # 7 : 78.13300042449771 FV at Mutated Child #2 at Generation # 7 : 95.63713884400745 --> Family: # 35 FV at Mutated Child #1 at Generation # 7 : 17.279241916446853 FV at Mutated Child #2 at Generation # 7 : 1753.2205907165473 --> Family: # 36 FV at Mutated Child #1 at Generation # 7: 80.0659089812268 FV at Mutated Child #2 at Generation # 7 : 58.22193818827829 --> Family: # 37

FV at Mutated Child #1 at Generation # 7 : 33.59363333934842

FV at Mutated Child #2 at Generation # 7 : 20.982412796379425 --> Family: # 38 FV at Mutated Child #1 at Generation # 7 : 9.58166184371771 FV at Mutated Child #2 at Generation # 7 : 1.643939332988376 --> Family: # 39 FV at Mutated Child #1 at Generation # 7 : 28.43538855143688 FV at Mutated Child #2 at Generation # 7 : 4.054618815413836 --> Family: # 40 FV at Mutated Child #1 at Generation # 7 : 8.51963203885381 FV at Mutated Child #2 at Generation # 7 : 163.40995182251393 --> Family: # 41 FV at Mutated Child #1 at Generation # 7: 1.9080734540904252 FV at Mutated Child #2 at Generation # 7: 13.451336560352898 --> Family: # 42 FV at Mutated Child #1 at Generation # 7 : 2.447742961769899 FV at Mutated Child #2 at Generation # 7 : 7.8643446218154915 --> Family: # 43 FV at Mutated Child #1 at Generation # 7: 115.32077885850299 FV at Mutated Child #2 at Generation # 7: 235.69076280027207 --> Family: # 44 FV at Mutated Child #1 at Generation # 7: 2.313595077713291 FV at Mutated Child #2 at Generation # 7 : 103.37673400612617 --> Family: # 45 FV at Mutated Child #1 at Generation # 7 : 82.79923816332958 FV at Mutated Child #2 at Generation # 7 : 424.4175064569589 --> Family: # 46 FV at Mutated Child #1 at Generation # 7: 11.848472542628107 FV at Mutated Child #2 at Generation # 7: 199.03545307135823 --> Family: # 47 FV at Mutated Child #1 at Generation # 7 : 78.26558376899477 FV at Mutated Child #2 at Generation # 7 : 54.23109941192766 --> Family: # 48 FV at Mutated Child #1 at Generation # 7 : 14.93333505663211 FV at Mutated Child #2 at Generation # 7 : 7.836670972794705 --> Family: # 49 FV at Mutated Child #1 at Generation # 7 : 560.2880815861528 FV at Mutated Child #2 at Generation # 7 : 4.099120708087892 --> Family: # 50 FV at Mutated Child #1 at Generation # 7 : 31.030666378022815 FV at Mutated Child #2 at Generation # 7 : 2.896021695614826 --> Family: # 51 FV at Mutated Child #1 at Generation # 7 : 128.3169910132595 FV at Mutated Child #2 at Generation # 7 : 7.834763009020684 --> Family: # 52 FV at Mutated Child #1 at Generation # 7: 179.6298195484717 FV at Mutated Child #2 at Generation # 7 : 373.52730544527645

--> Family: # 53 FV at Mutated Child #1 at Generation # 7 : 15.450481881428853 FV at Mutated Child #2 at Generation # 7: 0.9707715365390559 --> Family: # 54 FV at Mutated Child #1 at Generation # 7 : 53.15023567643331 FV at Mutated Child #2 at Generation # 7 : 22.67556694121747 --> Family: # 55 FV at Mutated Child #1 at Generation # 7 : 7.996420400345425 FV at Mutated Child #2 at Generation # 7 : 7.969216950357525 --> Family: # 56 FV at Mutated Child #1 at Generation # 7 : 21.919054158122723 FV at Mutated Child #2 at Generation # 7: 28.721905064914232 --> Family: # 57 FV at Mutated Child #1 at Generation # 7 : 3.827447535693878 FV at Mutated Child #2 at Generation # 7 : 27.81833571457393 --> Family: # 58 FV at Mutated Child #1 at Generation # 7 : 83.28627362684458 FV at Mutated Child #2 at Generation # 7: 222.01699747777485 --> Family: # 59 FV at Mutated Child #1 at Generation # 7: 97.23618181961373 FV at Mutated Child #2 at Generation # 7 : 45.62765821882618 --> Family: # 60 FV at Mutated Child #1 at Generation # 7 : 7.633036095270273 FV at Mutated Child #2 at Generation # 7: 19.602166924540832 --> Family: # 61 FV at Mutated Child #1 at Generation # 7 : 1506.8754288711914 FV at Mutated Child #2 at Generation # 7: 2974.3852798170333 --> Family: # 62 FV at Mutated Child #1 at Generation # 7 : 70.08028093449282 FV at Mutated Child #2 at Generation # 7 : 40.368599092940514 --> Family: # 63 FV at Mutated Child #1 at Generation # 7 : 2173.7945892142907 FV at Mutated Child #2 at Generation # 7 : 2500.1914030308253 --> Family: # 64 FV at Mutated Child #1 at Generation # 7 : 73.84527833823682 FV at Mutated Child #2 at Generation # 7 : 163.27886980148162 --> Family: # 65 FV at Mutated Child #1 at Generation # 7 : 8.238646432803003 FV at Mutated Child #2 at Generation # 7 : 135.90091844860535 --> Family: # 66 FV at Mutated Child #1 at Generation # 7 : 11.995604162761047 FV at Mutated Child #2 at Generation # 7 : 102.44769884684013 --> Family: # 67 FV at Mutated Child #1 at Generation # 7 : 62.08293915306373 FV at Mutated Child #2 at Generation # 7 : 25.30914241901274

--> Family: # 68

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FV at Mutated Child #1 at Generation # 7 : 597.6302878722743
FV at Mutated Child #2 at Generation # 7 : 38.901920469401084
--> Family: # 69
FV at Mutated Child #1 at Generation # 7: 45.05862501065225
FV at Mutated Child #2 at Generation # 7 : 95.80453705610316
--> Family: # 70
FV at Mutated Child #1 at Generation # 7: 27.021105227326288
FV at Mutated Child #2 at Generation # 7 : 3.066632662042948
--> Family: # 71
FV at Mutated Child #1 at Generation # 7 : 303.4639150484548
FV at Mutated Child #2 at Generation # 7 : 326.1635419851517
--> Family: # 72
FV at Mutated Child #1 at Generation # 7 : 34.11747245236833
FV at Mutated Child #2 at Generation # 7 : 47.24857738556213
--> Family: # 73
FV at Mutated Child #1 at Generation # 7 : 2.4493135839512434
FV at Mutated Child #2 at Generation # 7 : 29.66788975796035
--> Family: # 74
FV at Mutated Child #1 at Generation # 7 : 62.42344803541312
FV at Mutated Child #2 at Generation # 7 : 61.5430892745741
--> Family: # 75
FV at Mutated Child #1 at Generation # 7 : 2.847759492731622
FV at Mutated Child #2 at Generation # 7 : 26.041538031092873
--> Family: # 76
FV at Mutated Child #1 at Generation # 7 : 59122.82615758226
FV at Mutated Child #2 at Generation # 7 : 51856.64605310073
--> Family: # 77
FV at Mutated Child #1 at Generation # 7 : 5.5880106695766525
FV at Mutated Child #2 at Generation # 7 : 14.90277758362163
--> Family: # 78
FV at Mutated Child #1 at Generation # 7 : 56.750384315902664
FV at Mutated Child #2 at Generation # 7 : 147.99820245212032
--> Family: # 79
FV at Mutated Child #1 at Generation # 7 : 2.8198753781308947
FV at Mutated Child #2 at Generation # 7 : 64.87366506983834
--> Family: # 80
FV at Mutated Child #1 at Generation # 7 : 193.0784559747343
FV at Mutated Child #2 at Generation # 7 : 17.85860714232085
--> Generation: # 8
--> Family: # 1
FV at Mutated Child #1 at Generation # 8 : 2.570853452910606
FV at Mutated Child #2 at Generation #8: 1.9005251904918985
--> Family: # 2
FV at Mutated Child #1 at Generation # 8 : 43228.56541807141
FV at Mutated Child #2 at Generation #8: 41677.954620776465
--> Family: # 3
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FV at Mutated Child #1 at Generation #8: 100.75488751332232
FV at Mutated Child #2 at Generation # 8 : 496.07970850696523
--> Family: # 4
FV at Mutated Child #1 at Generation # 8 : 2.686596897173969
FV at Mutated Child #2 at Generation #8: 0.5525270688928496
--> Family: # 5
FV at Mutated Child #1 at Generation # 8 : 595.4586849255347
FV at Mutated Child #2 at Generation #8: 53.896805853341746
--> Family: # 6
FV at Mutated Child #1 at Generation #8: 498.89304675004666
FV at Mutated Child #2 at Generation # 8 : 10.217120924004691
--> Family: # 7
FV at Mutated Child #1 at Generation # 8 : 1073.4541201703298
FV at Mutated Child #2 at Generation # 8 : 906.6355298154929
--> Family: # 8
FV at Mutated Child #1 at Generation #8: 0.8970884947312533
FV at Mutated Child #2 at Generation #8: 16.636661179384518
--> Family: # 9
FV at Mutated Child #1 at Generation # 8 : 97.37441142483544
FV at Mutated Child #2 at Generation # 8 : 76.8108933780361
--> Family: # 10
FV at Mutated Child #1 at Generation # 8 : 1.8111023916759788
FV at Mutated Child #2 at Generation # 8 : 2.236203403030933
--> Family: # 11
FV at Mutated Child #1 at Generation # 8: 0.2765951356324197
FV at Mutated Child #2 at Generation #8: 15.385095845906958
--> Family: # 12
FV at Mutated Child #1 at Generation # 8 : 66.42383950802035
FV at Mutated Child #2 at Generation # 8 : 140.31476847423522
--> Family: # 13
FV at Mutated Child #1 at Generation # 8: 2356.318974543516
FV at Mutated Child #2 at Generation # 8 : 1867.8253804134158
--> Family: # 14
FV at Mutated Child #1 at Generation # 8: 130.3980934492401
FV at Mutated Child #2 at Generation # 8 : 6.752988526514824
--> Family: # 15
FV at Mutated Child #1 at Generation #8: 29.80812792988511
FV at Mutated Child #2 at Generation # 8 : 9.874909187691793
--> Family: # 16
FV at Mutated Child #1 at Generation # 8 : 471.7570348802375
FV at Mutated Child #2 at Generation #8: 23.447435137178395
--> Family: # 17
FV at Mutated Child #1 at Generation # 8 : 1.602703656261695
FV at Mutated Child #2 at Generation # 8: 6.443052524483061
--> Family: # 18
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FV at Mutated Child #1 at Generation # 8 : 2.708410872459635 FV at Mutated Child #2 at Generation # 8 : 15.754714414257247 --> Family: # 19 FV at Mutated Child #1 at Generation # 8 : 24.391682069833326 FV at Mutated Child #2 at Generation #8: 1.6831352837997393 --> Family: # 20 FV at Mutated Child #1 at Generation # 8 : 58842.57919775558 FV at Mutated Child #2 at Generation # 8 : 47471.00095589974 --> Family: # 21 FV at Mutated Child #1 at Generation #8: 2.113464560107079 FV at Mutated Child #2 at Generation #8: 2163.0436586361243 --> Family: # 22 FV at Mutated Child #1 at Generation # 8 : 68.16034246223559 FV at Mutated Child #2 at Generation # 8 : 156.45592757868198 --> Family: # 23 FV at Mutated Child #1 at Generation #8: 14.914683698853036 FV at Mutated Child #2 at Generation # 8: 6.1164028537269655 --> Family: # 24 FV at Mutated Child #1 at Generation # 8 : 15.636017338105647 FV at Mutated Child #2 at Generation # 8 : 2066.9617350993185 --> Family: # 25 FV at Mutated Child #1 at Generation # 8: 2009.7340686906828 FV at Mutated Child #2 at Generation #8: 2496.1639670058894 --> Family: # 26 FV at Mutated Child #1 at Generation # 8 : 51.32654335212178 FV at Mutated Child #2 at Generation # 8 : 3.1293876717544946 --> Family: # 27 FV at Mutated Child #1 at Generation # 8 : 143.66409353016465 FV at Mutated Child #2 at Generation # 8 : 4.501423710279377 --> Family: # 28 FV at Mutated Child #1 at Generation # 8 : 10.79991193383293 FV at Mutated Child #2 at Generation #8: 62.039801653760826 --> Family: # 29 FV at Mutated Child #1 at Generation # 8 : 3.530637631477204 FV at Mutated Child #2 at Generation # 8 : 158.34876930715168 --> Family: # 30 FV at Mutated Child #1 at Generation # 8 : 1.391742910320857 FV at Mutated Child #2 at Generation # 8 : 19.96627451111066 --> Family: # 31 FV at Mutated Child #1 at Generation # 8 : 3.77605857704662 FV at Mutated Child #2 at Generation # 8 : 1.455809411637682 --> Family: # 32 FV at Mutated Child #1 at Generation # 8: 63.19431795067903 FV at Mutated Child #2 at Generation # 8 : 126.35624610357374 --> Family: # 33 FV at Mutated Child #1 at Generation # 8 : 27553.068606594672

FV at Mutated Child #2 at Generation # 8 : 22044.119462454037 --> Family: # 34 FV at Mutated Child #1 at Generation # 8 : 13.248117550960451 FV at Mutated Child #2 at Generation # 8 : 42.13999480415947 --> Family: # 35 FV at Mutated Child #1 at Generation # 8 : 5.737549650356454 FV at Mutated Child #2 at Generation #8: 11.812069210998859 --> Family: # 36 FV at Mutated Child #1 at Generation # 8 : 6.21695293528707 FV at Mutated Child #2 at Generation # 8 : 1.411874875364972 --> Family: # 37 FV at Mutated Child #1 at Generation # 8: 493.91134345079826 FV at Mutated Child #2 at Generation # 8 : 518.3384478240198 --> Family: # 38 FV at Mutated Child #1 at Generation # 8 : 572.5930681499271 FV at Mutated Child #2 at Generation # 8 : 106.49375049067719 --> Family: # 39 FV at Mutated Child #1 at Generation # 8 : 65.95187444126994 FV at Mutated Child #2 at Generation #8: 1.9392611913956372 --> Family: # 40 FV at Mutated Child #1 at Generation # 8: 160.15652290315631 FV at Mutated Child #2 at Generation # 8 : 64.93100196047898 --> Family: # 41 FV at Mutated Child #1 at Generation # 8: 111.89765794527044 FV at Mutated Child #2 at Generation #8: 135.72260302358495 --> Family: # 42 FV at Mutated Child #1 at Generation # 8: 3.5186513114855833 FV at Mutated Child #2 at Generation #8: 25.805309784298448 --> Family: # 43 FV at Mutated Child #1 at Generation #8: 60.59896600354469 FV at Mutated Child #2 at Generation # 8: 458.1727683007028 --> Family: # 44 FV at Mutated Child #1 at Generation # 8 : 540.0378525785655 FV at Mutated Child #2 at Generation # 8 : 200.36765359097816 --> Family: # 45 FV at Mutated Child #1 at Generation # 8 : 10.315283347016871 FV at Mutated Child #2 at Generation #8: 3.5943509436734717 --> Family: # 46 FV at Mutated Child #1 at Generation # 8 : 2.553989362902356 FV at Mutated Child #2 at Generation # 8 : 2.9329831115433596 --> Family: # 47 FV at Mutated Child #1 at Generation # 8 : 1685.494758599471 FV at Mutated Child #2 at Generation # 8 : 1185.2577022285827 --> Family: # 48 FV at Mutated Child #1 at Generation # 8: 6.321900316720811 FV at Mutated Child #2 at Generation # 8 : 33.64466865422967

--> Family: # 49 FV at Mutated Child #1 at Generation # 8 : 48.75969207402596 FV at Mutated Child #2 at Generation #8: 4.488595475101104 --> Family: # 50 FV at Mutated Child #1 at Generation # 8 : 42348.49068968331 FV at Mutated Child #2 at Generation # 8 : 38457.49942620794 --> Family: # 51 FV at Mutated Child #1 at Generation # 8: 110.41326370125466 FV at Mutated Child #2 at Generation #8: 1.5195060249561851 --> Family: # 52 FV at Mutated Child #1 at Generation # 8 : 31.580239508029933 FV at Mutated Child #2 at Generation # 8 : 0.387901490869461 --> Family: # 53 FV at Mutated Child #1 at Generation # 8 : 36411.93938381902 FV at Mutated Child #2 at Generation # 8: 49655.78971891793 --> Family: # 54 FV at Mutated Child #1 at Generation # 8 : 4.31833954795893 FV at Mutated Child #2 at Generation #8: 29.905547715389517 --> Family: # 55 FV at Mutated Child #1 at Generation # 8 : 2.6654349143646363 FV at Mutated Child #2 at Generation # 8 : 2.443021060914755 --> Family: # 56 FV at Mutated Child #1 at Generation # 8 : 2.232618536943003 FV at Mutated Child #2 at Generation # 8 : 22.53479708762152 --> Family: # 57 FV at Mutated Child #1 at Generation #8: 401.2286435113572 FV at Mutated Child #2 at Generation #8: 79.2344984718615 --> Family: # 58 FV at Mutated Child #1 at Generation # 8 : 50772.46277722628 FV at Mutated Child #2 at Generation # 8 : 38256.7290542491 --> Family: # 59 FV at Mutated Child #1 at Generation # 8 : 2.1280571848198737 FV at Mutated Child #2 at Generation # 8 : 17.478055083438548 --> Family: # 60 FV at Mutated Child #1 at Generation # 8 : 1.8439524265329688 FV at Mutated Child #2 at Generation # 8 : 2.066089556466939 --> Family: # 61 FV at Mutated Child #1 at Generation # 8 : 0.802179387349851 FV at Mutated Child #2 at Generation # 8 : 404.66600779428194 --> Family: # 62 FV at Mutated Child #1 at Generation # 8 : 24.34031241596109 FV at Mutated Child #2 at Generation # 8 : 2.6347696493123394 --> Family: # 63 FV at Mutated Child #1 at Generation # 8 : 4.238510657648223 FV at Mutated Child #2 at Generation #8: 28.372919577627368

--> Family: # 64

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FV at Mutated Child #1 at Generation # 8 : 351.9171083841299
FV at Mutated Child #2 at Generation # 8 : 442.93468761668197
--> Family: # 65
FV at Mutated Child #1 at Generation # 8 : 543.98261837711
FV at Mutated Child #2 at Generation # 8 : 0.41488731495056413
--> Family: # 66
FV at Mutated Child #1 at Generation # 8: 0.4921393115946484
FV at Mutated Child #2 at Generation #8: 57.01988081449813
--> Family: # 67
FV at Mutated Child #1 at Generation # 8: 98.50088804364613
FV at Mutated Child #2 at Generation # 8 : 30.99488317143929
--> Family: # 68
FV at Mutated Child #1 at Generation # 8 : 4.980014271691624
FV at Mutated Child #2 at Generation # 8 : 20.581117588000957
--> Family: # 69
FV at Mutated Child #1 at Generation # 8: 15.217751318181026
FV at Mutated Child #2 at Generation #8: 118.63359905867495
--> Family: # 70
FV at Mutated Child #1 at Generation # 8 : 8.1291892235894
FV at Mutated Child #2 at Generation #8: 131.47455903463546
--> Family: # 71
FV at Mutated Child #1 at Generation # 8 : 56732.68605073377
FV at Mutated Child #2 at Generation # 8 : 35821.41340967238
--> Family: # 72
FV at Mutated Child #1 at Generation # 8 : 50.44747571402985
FV at Mutated Child #2 at Generation # 8 : 2.763741956724857
--> Family: # 73
FV at Mutated Child #1 at Generation # 8 : 7.890869919919654
FV at Mutated Child #2 at Generation # 8 : 270.1766612421353
--> Family: # 74
FV at Mutated Child #1 at Generation # 8 : 1.2386928733338625
FV at Mutated Child #2 at Generation # 8 : 2.283092123410275
--> Family: # 75
FV at Mutated Child #1 at Generation # 8: 4.450992299492643
FV at Mutated Child #2 at Generation # 8 : 2.33818984228245
--> Family: # 76
FV at Mutated Child #1 at Generation # 8 : 2.205365361038728
FV at Mutated Child #2 at Generation # 8 : 33.06708176596431
--> Family: # 77
FV at Mutated Child #1 at Generation # 8 : 62.15795451887983
FV at Mutated Child #2 at Generation # 8 : 30.12728204426976
--> Family: # 78
FV at Mutated Child #1 at Generation #8: 2433.1377895988876
FV at Mutated Child #2 at Generation # 8 : 5.753139035547251
--> Family: # 79
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FV at Mutated Child #1 at Generation # 8 : 2.259600801836669 FV at Mutated Child #2 at Generation #8: 12.995870048102411 --> Family: # 80 FV at Mutated Child #1 at Generation # 8 : 0.7824998646335398 FV at Mutated Child #2 at Generation #8: 5.3740332417722305 --> Generation: # 9 --> Family: # 1 FV at Mutated Child #1 at Generation # 9 : 4.352133123724754 FV at Mutated Child #2 at Generation # 9: 116.79806954260361 --> Family: # 2 FV at Mutated Child #1 at Generation # 9: 10.964757708267378 FV at Mutated Child #2 at Generation # 9: 0.8604075518787481 --> Family: # 3 FV at Mutated Child #1 at Generation # 9 : 40.64601249953651 FV at Mutated Child #2 at Generation # 9 : 118.24269544508434 --> Family: # 4 FV at Mutated Child #1 at Generation # 9 : 122.02602204107622 FV at Mutated Child #2 at Generation # 9 : 74.16354486466098 --> Family: # 5 FV at Mutated Child #1 at Generation # 9: 21.680434435660604 FV at Mutated Child #2 at Generation # 9 : 20.56432124430906 --> Family: # 6 FV at Mutated Child #1 at Generation # 9 : 27.28775337212059 FV at Mutated Child #2 at Generation # 9 : 4.2438790004161895 --> Family: # 7 FV at Mutated Child #1 at Generation # 9: 10.290862745351728 FV at Mutated Child #2 at Generation # 9: 182.38270963594363 --> Family: # 8 FV at Mutated Child #1 at Generation # 9 : 77.27093287454242 FV at Mutated Child #2 at Generation # 9 : 577.7330980756535 --> Family: # 9 FV at Mutated Child #1 at Generation # 9 : 2.3498782618510217 FV at Mutated Child #2 at Generation # 9 : 18.224880209496494 --> Family: # 10 FV at Mutated Child #1 at Generation # 9 : 8.328880423696903 FV at Mutated Child #2 at Generation # 9 : 7.079640930306752 --> Family: # 11 FV at Mutated Child #1 at Generation # 9 : 31.38903000443259 FV at Mutated Child #2 at Generation # 9 : 8.629185923181762 --> Family: # 12 FV at Mutated Child #1 at Generation # 9 : 6.615994840224577 FV at Mutated Child #2 at Generation # 9 : 1.4793434998701271 --> Family: # 13 FV at Mutated Child #1 at Generation # 9: 2.0740761339261713 FV at Mutated Child #2 at Generation # 9 : 28.767227880466013 --> Family: # 14

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FV at Mutated Child #1 at Generation # 9 : 2.4891425828826934 FV at Mutated Child #2 at Generation # 9 : 166.09522385781082 --> Family: # 15 FV at Mutated Child #1 at Generation # 9: 0.7002953713592761 FV at Mutated Child #2 at Generation # 9: 14.56535650309888 --> Family: # 16 FV at Mutated Child #1 at Generation # 9 : 42.53244515756695 FV at Mutated Child #2 at Generation # 9 : 552.859982182127 --> Family: # 17 FV at Mutated Child #1 at Generation # 9: 37974.67895746323 FV at Mutated Child #2 at Generation # 9 : 43982.489614349564 --> Family: # 18 FV at Mutated Child #1 at Generation # 9 : 2279.205795914502 FV at Mutated Child #2 at Generation # 9 : 2883.1455147487036 --> Family: # 19 FV at Mutated Child #1 at Generation # 9: 20.417771377460816 FV at Mutated Child #2 at Generation # 9 : 327.61275637712686 --> Family: # 20 FV at Mutated Child #1 at Generation # 9 : 152.8611565965204 FV at Mutated Child #2 at Generation # 9 : 550.330584651208 --> Family: # 21 FV at Mutated Child #1 at Generation # 9 : 41.603096132534546 FV at Mutated Child #2 at Generation # 9: 24.063902691679694 --> Family: # 22 FV at Mutated Child #1 at Generation # 9 : 116.68100818769688 FV at Mutated Child #2 at Generation # 9 : 572.5394516880231 --> Family: # 23 FV at Mutated Child #1 at Generation # 9 : 145.5621782124203 FV at Mutated Child #2 at Generation # 9 : 152.6774240059065 --> Family: # 24 FV at Mutated Child #1 at Generation # 9 : 3.3806685976385458 FV at Mutated Child #2 at Generation # 9 : 99.63743031945245 --> Family: # 25 FV at Mutated Child #1 at Generation # 9 : 41.33375344336206 FV at Mutated Child #2 at Generation # 9 : 3.314970780785917 --> Family: # 26 FV at Mutated Child #1 at Generation # 9 : 10.462490333086038 FV at Mutated Child #2 at Generation # 9 : 399.45571901597043 --> Family: # 27 FV at Mutated Child #1 at Generation # 9 : 211.29582982171323 FV at Mutated Child #2 at Generation # 9 : 484.76203435245105 --> Family: # 28 FV at Mutated Child #1 at Generation # 9: 21.758743430270005 FV at Mutated Child #2 at Generation # 9 : 5.429353687804979 --> Family: # 29

FV at Mutated Child #1 at Generation # 9 : 34.35380255569228

FV at Mutated Child #2 at Generation # 9 : 15.733667442216323 --> Family: # 30 FV at Mutated Child #1 at Generation # 9: 44.4399485679568 FV at Mutated Child #2 at Generation # 9 : 132.9067244636609 --> Family: # 31 FV at Mutated Child #1 at Generation # 9 : 20.53182545318996 FV at Mutated Child #2 at Generation # 9: 49.963076782268026 --> Family: # 32 FV at Mutated Child #1 at Generation # 9 : 56.14495939043907 FV at Mutated Child #2 at Generation # 9: 17.47327517203282 --> Family: # 33 FV at Mutated Child #1 at Generation # 9 : 14.428004804978093 FV at Mutated Child #2 at Generation # 9 : 81.35821028507314 --> Family: # 34 FV at Mutated Child #1 at Generation # 9 : 4.625144716538048 FV at Mutated Child #2 at Generation # 9 : 5.609979627573026 --> Family: # 35 FV at Mutated Child #1 at Generation # 9 : 47.308373620486236 FV at Mutated Child #2 at Generation # 9 : 4.046480438857364 --> Family: # 36 FV at Mutated Child #1 at Generation # 9: 3.255366582777257 FV at Mutated Child #2 at Generation # 9 : 7.717893042495037 --> Family: # 37 FV at Mutated Child #1 at Generation # 9: 2409.4194235407085 FV at Mutated Child #2 at Generation # 9: 25.980479263075647 --> Family: # 38 FV at Mutated Child #1 at Generation # 9 : 146.85170976988317 FV at Mutated Child #2 at Generation # 9 : 5.025277101240217 --> Family: # 39 FV at Mutated Child #1 at Generation # 9 : 17.262373026720482 FV at Mutated Child #2 at Generation # 9: 194.19568435560444 --> Family: # 40 FV at Mutated Child #1 at Generation # 9 : 3321.961307794047 FV at Mutated Child #2 at Generation # 9 : 2455.294159470982 --> Family: # 41 FV at Mutated Child #1 at Generation # 9: 11.718660606590937 FV at Mutated Child #2 at Generation # 9 : 42.438702525438494 --> Family: # 42 FV at Mutated Child #1 at Generation # 9 : 23.537704064938225 FV at Mutated Child #2 at Generation # 9 : 97.73394337164831 --> Family: # 43 FV at Mutated Child #1 at Generation # 9 : 40.2556239055749 FV at Mutated Child #2 at Generation # 9 : 2.3941871957290513 --> Family: # 44 FV at Mutated Child #1 at Generation # 9: 125.9392199189156 FV at Mutated Child #2 at Generation # 9 : 17.778897468368058

--> Family: # 45 FV at Mutated Child #1 at Generation # 9 : 1400.174392527013 FV at Mutated Child #2 at Generation # 9 : 2098.79072418223 --> Family: # 46 FV at Mutated Child #1 at Generation # 9 : 2.079931334728073 FV at Mutated Child #2 at Generation # 9: 17.104433137379143 --> Family: # 47 FV at Mutated Child #1 at Generation # 9: 188.32097515305102 FV at Mutated Child #2 at Generation # 9 : 586.380305164922 --> Family: # 48 FV at Mutated Child #1 at Generation # 9 : 3.8833565907973684 FV at Mutated Child #2 at Generation # 9 : 137.2335848520516 --> Family: # 49 FV at Mutated Child #1 at Generation # 9 : 60454.02720240549 FV at Mutated Child #2 at Generation # 9 : 59198.71086074392 --> Family: # 50 FV at Mutated Child #1 at Generation # 9 : 39.6378724013992 FV at Mutated Child #2 at Generation # 9: 10.296996234077392 --> Family: # 51 FV at Mutated Child #1 at Generation # 9: 49.515382019316064 FV at Mutated Child #2 at Generation # 9 : 13.491573244114418 --> Family: # 52 FV at Mutated Child #1 at Generation # 9 : 33.49972869499844 FV at Mutated Child #2 at Generation # 9 : 4.579906532476887 --> Family: # 53 FV at Mutated Child #1 at Generation # 9: 93.2455821433082 FV at Mutated Child #2 at Generation # 9 : 18.13791656934191 --> Family: # 54 FV at Mutated Child #1 at Generation # 9 : 9.354060479468135 FV at Mutated Child #2 at Generation # 9 : 64.5414565473886 --> Family: # 55 FV at Mutated Child #1 at Generation # 9 : 193.42284052532443 FV at Mutated Child #2 at Generation # 9 : 165.15950430791796 --> Family: # 56 FV at Mutated Child #1 at Generation # 9 : 56.72829754686071 FV at Mutated Child #2 at Generation # 9 : 15.149841627219525 --> Family: # 57 FV at Mutated Child #1 at Generation # 9 : 24.079582876222773 FV at Mutated Child #2 at Generation # 9 : 69.53251601601488 --> Family: # 58 FV at Mutated Child #1 at Generation # 9 : 2600.2690057541076 FV at Mutated Child #2 at Generation # 9 : 7.990499440440804 --> Family: # 59 FV at Mutated Child #1 at Generation # 9 : 216.83749431935064 FV at Mutated Child #2 at Generation # 9 : 15.43992023414854

--> Family: # 60

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FV at Mutated Child #1 at Generation # 9 : 50.57275653539327
FV at Mutated Child #2 at Generation # 9 : 106.6015160042687
--> Family: # 61
FV at Mutated Child #1 at Generation # 9: 498.2263730372256
FV at Mutated Child #2 at Generation # 9 : 2.947133976597928
--> Family: # 62
FV at Mutated Child #1 at Generation # 9 : 157.3271661910002
FV at Mutated Child #2 at Generation # 9: 81.85596026792676
--> Family: # 63
FV at Mutated Child #1 at Generation # 9 : 684.523370522583
FV at Mutated Child #2 at Generation # 9 : 18.289687751863514
--> Family: # 64
FV at Mutated Child #1 at Generation # 9 : 67524.34299919054
FV at Mutated Child #2 at Generation # 9 : 52552.75367429656
--> Family: # 65
FV at Mutated Child #1 at Generation # 9 : 7.518573947799805
FV at Mutated Child #2 at Generation # 9 : 44.2179202053577
--> Family: # 66
FV at Mutated Child #1 at Generation # 9: 2.1248915626497054
FV at Mutated Child #2 at Generation # 9 : 5.531026149395315
--> Family: # 67
FV at Mutated Child #1 at Generation # 9 : 8.903468273764764
FV at Mutated Child #2 at Generation # 9 : 47.883998142512034
--> Family: # 68
FV at Mutated Child #1 at Generation # 9: 7.4659680452436605
FV at Mutated Child #2 at Generation # 9 : 617.1214005958442
--> Family: # 69
FV at Mutated Child #1 at Generation # 9 : 97.6724884165093
FV at Mutated Child #2 at Generation # 9 : 4.2296776127329405
--> Family: # 70
FV at Mutated Child #1 at Generation # 9 : 12.356892836137703
FV at Mutated Child #2 at Generation # 9 : 65.51117838396331
--> Family: # 71
FV at Mutated Child #1 at Generation # 9 : 12.602823777049498
FV at Mutated Child #2 at Generation # 9 : 596.676789955257
--> Family: # 72
FV at Mutated Child #1 at Generation # 9 : 17.82691230729758
FV at Mutated Child #2 at Generation # 9 : 20.19131508554954
--> Family: # 73
FV at Mutated Child #1 at Generation # 9 : 44967.01565394367
FV at Mutated Child #2 at Generation # 9: 42999.703720347316
--> Family: # 74
FV at Mutated Child #1 at Generation # 9: 80.33448401487615
FV at Mutated Child #2 at Generation # 9 : 21.185946072534826
--> Family: # 75
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FV at Mutated Child #1 at Generation # 9 : 16.631682039510988 FV at Mutated Child #2 at Generation # 9 : 10.002533055771824 --> Family: # 76 FV at Mutated Child #1 at Generation # 9 : 6.72980245227463 FV at Mutated Child #2 at Generation # 9: 48.064835288816575 --> Family: # 77 FV at Mutated Child #1 at Generation # 9 : 3.358329071023411 FV at Mutated Child #2 at Generation # 9 : 0.9221193005823647 --> Family: # 78 FV at Mutated Child #1 at Generation # 9: 137.32020257243394 FV at Mutated Child #2 at Generation # 9: 3.6519550174242026 --> Family: # 79 FV at Mutated Child #1 at Generation # 9: 1.6070437816370386 FV at Mutated Child #2 at Generation # 9 : 8.26163053182017 --> Family: # 80 FV at Mutated Child #1 at Generation # 9: 2.6395092724989344 FV at Mutated Child #2 at Generation # 9 : 1.6764683920098138 --> Generation: # 10 --> Family: # 1 FV at Mutated Child #1 at Generation # 10 : 538.1138930297369 FV at Mutated Child #2 at Generation # 10 : 1.3559872173397398 --> Family: # 2 FV at Mutated Child #1 at Generation # 10 : 1.2887562783566544 FV at Mutated Child #2 at Generation # 10 : 15.429731389659 --> Family: # 3 FV at Mutated Child #1 at Generation # 10 : 0.8182437704711126 FV at Mutated Child #2 at Generation # 10 : 147.73394161150966 --> Family: # 4 FV at Mutated Child #1 at Generation # 10 : 24.518952148990916 FV at Mutated Child #2 at Generation # 10 : 9.403087248178656 --> Family: # 5 FV at Mutated Child #1 at Generation # 10 : 40.86863559382468 FV at Mutated Child #2 at Generation # 10 : 17.722807386899525 --> Family: # 6 FV at Mutated Child #1 at Generation # 10 : 24.569382900816287 FV at Mutated Child #2 at Generation # 10 : 3.9116678682658095 --> Family: # 7 FV at Mutated Child #1 at Generation # 10 : 38.735077081182176 FV at Mutated Child #2 at Generation # 10 : 139.43496196892534 --> Family: # 8 FV at Mutated Child #1 at Generation # 10 : 57793.91003603414 FV at Mutated Child #2 at Generation # 10 : 43844.6904080882 --> Family: # 9 FV at Mutated Child #1 at Generation # 10 : 42.91785446483473 FV at Mutated Child #2 at Generation # 10 : 6.397658227755976 --> Family: # 10

FV at Mutated Child #1 at Generation # 10 : 0.8517547228291691 FV at Mutated Child #2 at Generation # 10 : 79.17959229606025 --> Family: # 11 FV at Mutated Child #1 at Generation # 10 : 2.605996455907622 FV at Mutated Child #2 at Generation # 10 : 23.386300866741152 --> Family: # 12 FV at Mutated Child #1 at Generation # 10 : 3.64625395862266 FV at Mutated Child #2 at Generation # 10 : 0.9440488631936592 --> Family: # 13 FV at Mutated Child #1 at Generation # 10 : 1.9370856171876456 FV at Mutated Child #2 at Generation # 10 : 0.4723781214538809 --> Family: # 14 FV at Mutated Child #1 at Generation # 10 : 1.1887124586359608 FV at Mutated Child #2 at Generation # 10 : 21.670772762437284 --> Family: # 15 FV at Mutated Child #1 at Generation # 10 : 2.531668813834644 FV at Mutated Child #2 at Generation # 10 : 64.28394619939182 --> Family: # 16 FV at Mutated Child #1 at Generation # 10 : 10.557898599028979 FV at Mutated Child #2 at Generation # 10 : 0.5720708141571622 --> Family: # 17 FV at Mutated Child #1 at Generation # 10 : 2.4720182738996845 FV at Mutated Child #2 at Generation # 10 : 112.64351353281526 --> Family: # 18 FV at Mutated Child #1 at Generation # 10 : 499.14814576401176 FV at Mutated Child #2 at Generation # 10 : 28.55897693074067 --> Family: # 19 FV at Mutated Child #1 at Generation # 10 : 149.66878980020107 FV at Mutated Child #2 at Generation # 10 : 154.24247638970465 --> Family: # 20 FV at Mutated Child #1 at Generation # 10 : 9.851778158786715 FV at Mutated Child #2 at Generation # 10 : 66.19856888099525 --> Family: # 21 FV at Mutated Child #1 at Generation # 10 : 1102.3611330862386 FV at Mutated Child #2 at Generation # 10 : 20.27174082267986 --> Family: # 22 FV at Mutated Child #1 at Generation # 10 : 27.138071661079607 FV at Mutated Child #2 at Generation # 10 : 1.6544415185175798 --> Family: # 23 FV at Mutated Child #1 at Generation # 10 : 3.8592942776445263 FV at Mutated Child #2 at Generation # 10 : 93.71345502084337 --> Family: # 24 FV at Mutated Child #1 at Generation # 10 : 129.78597278217293 FV at Mutated Child #2 at Generation # 10 : 17.479587491503956

--> Family: # 25 FV at Mutated Child #1 at Generation # 10 : 50.04877319242439

FV at Mutated Child #2 at Generation # 10 : 302.3081481636223 --> Family: # 26 FV at Mutated Child #1 at Generation # 10 : 10.789293132697797 FV at Mutated Child #2 at Generation # 10 : 1.7693170158538813 --> Family: # 27 FV at Mutated Child #1 at Generation # 10 : 96.49944558521723 FV at Mutated Child #2 at Generation # 10 : 21.20752341503717 --> Family: # 28 FV at Mutated Child #1 at Generation # 10 : 1.3338092744481536 FV at Mutated Child #2 at Generation # 10 : 581.18972660582 --> Family: # 29 FV at Mutated Child #1 at Generation # 10 : 33157.27093168093 FV at Mutated Child #2 at Generation # 10 : 44844.0206433351 --> Family: # 30 FV at Mutated Child #1 at Generation # 10 : 46840.66401089528 FV at Mutated Child #2 at Generation # 10 : 38104.65726462366 --> Family: # 31 FV at Mutated Child #1 at Generation # 10 : 1.5942644439397406 FV at Mutated Child #2 at Generation # 10 : 0.7027799197142371 --> Family: # 32 FV at Mutated Child #1 at Generation # 10 : 1.1560024746476802 FV at Mutated Child #2 at Generation # 10 : 1.6304582062120394 --> Family: # 33 FV at Mutated Child #1 at Generation # 10 : 2.829385654371335 FV at Mutated Child #2 at Generation # 10 : 24.67940137139905 --> Family: # 34 FV at Mutated Child #1 at Generation # 10 : 607.8638139588337 FV at Mutated Child #2 at Generation # 10 : 2179.223269563411 --> Family: # 35 FV at Mutated Child #1 at Generation # 10 : 527.3764688949883 FV at Mutated Child #2 at Generation # 10 : 1.354735735500438 --> Family: # 36 FV at Mutated Child #1 at Generation # 10 : 69.16589329216089 FV at Mutated Child #2 at Generation # 10 : 110.68644285061161 --> Family: # 37 FV at Mutated Child #1 at Generation # 10 : 27.321690391211455 FV at Mutated Child #2 at Generation # 10 : 1.714742828831138 --> Family: # 38 FV at Mutated Child #1 at Generation # 10 : 8.910763589309326 FV at Mutated Child #2 at Generation # 10 : 0.45425176510218285 --> Family: # 39 FV at Mutated Child #1 at Generation # 10 : 1180.1679238328852 FV at Mutated Child #2 at Generation # 10 : 2889.5138627790325 --> Family: # 40 FV at Mutated Child #1 at Generation # 10 : 32.58601334606542

FV at Mutated Child #2 at Generation # 10 : 0.7661060625311172

--> Family: # 41

FV at Mutated Child #1 at Generation # 10 : 2.792131059452501 FV at Mutated Child #2 at Generation # 10 : 2.801901557336408

--> Family: # 42

FV at Mutated Child #1 at Generation # 10 : 29.96251798269525 FV at Mutated Child #2 at Generation # 10 : 7.439704312860071

--> Family: # 43

FV at Mutated Child #1 at Generation # 10 : 62.619155178026276 FV at Mutated Child #2 at Generation # 10 : 0.46341845849160845

--> Family: # 44

FV at Mutated Child #1 at Generation # 10 : 1.973596060126281 FV at Mutated Child #2 at Generation # 10 : 124.56576945153085

--> Family: # 45

FV at Mutated Child #1 at Generation # 10 : 88.29368401318081 FV at Mutated Child #2 at Generation # 10 : 0.7252376578128081 --> Family: # 46

FV at Mutated Child #1 at Generation # 10 : 2.6684770621189333 FV at Mutated Child #2 at Generation # 10 : 0.7629932975681762 --> Family: # 47

FV at Mutated Child #1 at Generation # 10 : 29.759843557495753 FV at Mutated Child #2 at Generation # 10 : 3.090456938700983

--> Family: # 48

FV at Mutated Child #1 at Generation # 10 : 4.849091384520668 FV at Mutated Child #2 at Generation # 10 : 85.59108775690383

--> Family: # 49

FV at Mutated Child #1 at Generation # 10 : 2.1658267724817644 FV at Mutated Child #2 at Generation # 10 : 618.4446345369321 --> Family: # 50

FV at Mutated Child #1 at Generation # 10 : 1.593331715890352 FV at Mutated Child #2 at Generation # 10 : 4.678775203891012 --> Family: # 51

FV at Mutated Child #1 at Generation # 10 : 8.924975174852149 FV at Mutated Child #2 at Generation # 10 : 30.06185166132278 --> Family: # 52

FV at Mutated Child #1 at Generation # 10 : 21.648934124816094 FV at Mutated Child #2 at Generation # 10 : 2495.0003550103343 --> Family: # 53

FV at Mutated Child #1 at Generation # 10 : 2454.8230718150207 FV at Mutated Child #2 at Generation # 10 : 101.77958366119769 --> Family: # 54

FV at Mutated Child #1 at Generation # 10 : 2.8472281686429484 FV at Mutated Child #2 at Generation # 10 : 25.961365389659072

--> Family: # 55

FV at Mutated Child #1 at Generation # 10 : 11.856385763484262 FV at Mutated Child #2 at Generation # 10 : 6.2771756393082505 --> Family: # 56

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FV at Mutated Child #2 at Generation # 10 : 0.6210761416316926
--> Family: # 57
FV at Mutated Child #1 at Generation # 10 : 7.117750871993133
FV at Mutated Child #2 at Generation # 10 : 96.52986385628219
--> Family: # 58
FV at Mutated Child #1 at Generation # 10 : 5.920468224929484
FV at Mutated Child #2 at Generation # 10 : 3.0079037810276334
--> Family: # 59
FV at Mutated Child #1 at Generation # 10 : 6.626910787861148
FV at Mutated Child #2 at Generation # 10 : 14.61450232922726
--> Family: # 60
FV at Mutated Child #1 at Generation # 10 : 3.688104994797376
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--> Family: # 61
FV at Mutated Child #1 at Generation # 10 : 2628.380386614855
FV at Mutated Child #2 at Generation # 10 : 2134.114506577751
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FV at Mutated Child #1 at Generation # 10 : 56865.275075313584
FV at Mutated Child #2 at Generation # 10 : 51416.47267189226
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FV at Mutated Child #2 at Generation # 10 : 15.697399892700046
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--> Family: # 66
FV at Mutated Child #1 at Generation # 10 : 142.1624874724905
FV at Mutated Child #2 at Generation # 10 : 4.800619615011367
--> Family: # 67
FV at Mutated Child #1 at Generation # 10 : 17.95842384033285
FV at Mutated Child #2 at Generation # 10 : 1.8051790959946512
--> Family: # 68
FV at Mutated Child #1 at Generation # 10 : 16.56320450986233
FV at Mutated Child #2 at Generation # 10 : 6.329609795769537
--> Family: # 69
FV at Mutated Child #1 at Generation # 10 : 2.974842267469735
FV at Mutated Child #2 at Generation # 10 : 99.61988576246424
--> Family: # 70
FV at Mutated Child #1 at Generation # 10 : 552.6609076606373
FV at Mutated Child #2 at Generation # 10 : 28.11125222999771
--> Family: # 71
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FV at Mutated Child #1 at Generation # 10 : 7.56392741191711 FV at Mutated Child #2 at Generation # 10 : 22.792386817729383 --> Family: # 72 FV at Mutated Child #1 at Generation # 10 : 510.91886361302323 FV at Mutated Child #2 at Generation # 10 : 5.603132734428224 --> Family: # 73 FV at Mutated Child #1 at Generation # 10 : 3354.5081053239287 FV at Mutated Child #2 at Generation # 10 : 1502.712708431595 --> Family: # 74 FV at Mutated Child #1 at Generation # 10 : 8.217677597812937 FV at Mutated Child #2 at Generation # 10 : 2406.0577203797448 --> Family: # 75 FV at Mutated Child #1 at Generation # 10 : 0.9543129018945677 FV at Mutated Child #2 at Generation # 10 : 1.27199712835213 --> Family: # 76 FV at Mutated Child #1 at Generation # 10 : 5.12078122180707 FV at Mutated Child #2 at Generation # 10 : 73.46905588478916 --> Family: # 77 FV at Mutated Child #1 at Generation # 10 : 4.753527650003688 FV at Mutated Child #2 at Generation # 10 : 18.67600717539851 --> Family: # 78 FV at Mutated Child #1 at Generation # 10 : 10.199140020876316 FV at Mutated Child #2 at Generation # 10 : 18.830637383804813 --> Family: # 79 FV at Mutated Child #1 at Generation # 10 : 3.6047546704963267 FV at Mutated Child #2 at Generation # 10 : 2.2596424573243343 --> Family: # 80 FV at Mutated Child #1 at Generation # 10 : 2831.157572394152 FV at Mutated Child #2 at Generation # 10 : 2097.1082598225375 --> Generation: # 11 --> Family: # 1 FV at Mutated Child #1 at Generation # 11 : 12.222219010264475 FV at Mutated Child #2 at Generation # 11 : 63.75451820630091 --> Family: # 2 FV at Mutated Child #1 at Generation # 11 : 63241.96722939453 FV at Mutated Child #2 at Generation # 11 : 48390.60536461166 --> Family: # 3 FV at Mutated Child #1 at Generation # 11 : 69.16264087803414 FV at Mutated Child #2 at Generation # 11 : 50.12269667111582 --> Family: # 4 FV at Mutated Child #1 at Generation # 11 : 34.859853868725345 FV at Mutated Child #2 at Generation # 11 : 197.80887904600004 --> Family: # 5 FV at Mutated Child #1 at Generation # 11 : 15.313096763526937 FV at Mutated Child #2 at Generation # 11 : 30.98216944846205 --> Family: # 6

FV at Mutated Child #1 at Generation # 11 : 42035.50008651976 FV at Mutated Child #2 at Generation # 11 : 59265.382578224264 --> Family: # 7 FV at Mutated Child #1 at Generation # 11 : 31642.461097834515 FV at Mutated Child #2 at Generation # 11 : 29760.441613885036 --> Family: # 8 FV at Mutated Child #1 at Generation # 11 : 3.6253824673295747 FV at Mutated Child #2 at Generation # 11 : 8.999898126968702 --> Family: # 9 FV at Mutated Child #1 at Generation # 11 : 6.456409670204366 FV at Mutated Child #2 at Generation # 11 : 18.890108720235403 --> Family: # 10 FV at Mutated Child #1 at Generation # 11 : 41.95943255085951 FV at Mutated Child #2 at Generation # 11 : 1533.9552326205348 --> Family: # 11 FV at Mutated Child #1 at Generation # 11 : 86.85429876324494 FV at Mutated Child #2 at Generation # 11 : 762.5776854776375 --> Family: # 12 FV at Mutated Child #1 at Generation # 11 : 29.567512986769948 FV at Mutated Child #2 at Generation # 11 : 2.3602745486057706 --> Family: # 13 FV at Mutated Child #1 at Generation # 11 : 68.83698349263186 FV at Mutated Child #2 at Generation # 11 : 7.129425477746257 --> Family: # 14 FV at Mutated Child #1 at Generation # 11 : 2.959334258944883 FV at Mutated Child #2 at Generation # 11 : 147.853827242084 --> Family: # 15 FV at Mutated Child #1 at Generation # 11 : 29.652864590681677 FV at Mutated Child #2 at Generation # 11 : 197.9901557091309 --> Family: # 16 FV at Mutated Child #1 at Generation # 11 : 6.505285422031994 FV at Mutated Child #2 at Generation # 11 : 6.200948676207088 --> Family: # 17 FV at Mutated Child #1 at Generation # 11 : 6.098073821580164 FV at Mutated Child #2 at Generation # 11 : 555.7876437166736 --> Family: # 18 FV at Mutated Child #1 at Generation # 11 : 1822.4201387982062 FV at Mutated Child #2 at Generation # 11 : 1425.5543513355283 --> Family: # 19 FV at Mutated Child #1 at Generation # 11 : 10.981816400106599 FV at Mutated Child #2 at Generation # 11 : 2.298812874203669 --> Family: # 20 FV at Mutated Child #1 at Generation # 11 : 3.419985051670099 FV at Mutated Child #2 at Generation # 11 : 8.093092857301098 --> Family: # 21

FV at Mutated Child #1 at Generation # 11 : 178.49528856547002

FV at Mutated Child #2 at Generation # 11 : 141.5044471970953 --> Family: # 22 FV at Mutated Child #1 at Generation # 11 : 42.18063294017759 FV at Mutated Child #2 at Generation # 11 : 5.348004471883392 --> Family: # 23 FV at Mutated Child #1 at Generation # 11 : 8.184157116061343 FV at Mutated Child #2 at Generation # 11 : 6.545870949437334 --> Family: # 24 FV at Mutated Child #1 at Generation # 11 : 5.527731517277378 FV at Mutated Child #2 at Generation # 11 : 7.844289798388513 --> Family: # 25 FV at Mutated Child #1 at Generation # 11 : 35.69898231043215 FV at Mutated Child #2 at Generation # 11 : 3.8267520377701465 --> Family: # 26 FV at Mutated Child #1 at Generation # 11 : 12.236665563973677 FV at Mutated Child #2 at Generation # 11 : 56.41322959642086 --> Family: # 27 FV at Mutated Child #1 at Generation # 11 : 154.66070368003872 FV at Mutated Child #2 at Generation # 11 : 143.8170467153448 --> Family: # 28 FV at Mutated Child #1 at Generation # 11 : 19.24785486824785 FV at Mutated Child #2 at Generation # 11 : 9.47695375279434 --> Family: # 29 FV at Mutated Child #1 at Generation # 11 : 24.79721507229838 FV at Mutated Child #2 at Generation # 11 : 2.002032460197799 --> Family: # 30 FV at Mutated Child #1 at Generation # 11 : 269.60224427438106 FV at Mutated Child #2 at Generation # 11 : 117.9011369734855 --> Family: # 31 FV at Mutated Child #1 at Generation # 11 : 49.93307552513411 FV at Mutated Child #2 at Generation # 11: 38.239646301408655 --> Family: # 32 FV at Mutated Child #1 at Generation # 11: 3199.8156772481184 FV at Mutated Child #2 at Generation # 11 : 1794.9819279670141 --> Family: # 33 FV at Mutated Child #1 at Generation # 11 : 10.002877503317308 FV at Mutated Child #2 at Generation # 11 : 3.9557280897432117 --> Family: # 34 FV at Mutated Child #1 at Generation # 11 : 1.8217152015869034 FV at Mutated Child #2 at Generation # 11 : 1.0287554112300845 --> Family: # 35 FV at Mutated Child #1 at Generation # 11 : 12.032858041915446 FV at Mutated Child #2 at Generation # 11 : 2407.0368741464126 --> Family: # 36 FV at Mutated Child #1 at Generation # 11 : 61089.66683787683 FV at Mutated Child #2 at Generation # 11 : 49836.73237721294

Ex_1_2_3 --> Family: # 37 FV at Mutated Child #1 at Generation # 11 : 15.303782180296112 FV at Mutated Child #2 at Generation # 11 : 4.825714155272587 --> Family: # 38 FV at Mutated Child #1 at Generation # 11 : 3.2750669438579036 FV at Mutated Child #2 at Generation # 11 : 192.8459369643487 --> Family: # 39 FV at Mutated Child #1 at Generation # 11 : 673.0654190000984 FV at Mutated Child #2 at Generation # 11 : 7.049651293993413 --> Family: # 40 FV at Mutated Child #1 at Generation # 11 : 215.02248594441494 FV at Mutated Child #2 at Generation # 11 : 20.912121383699237 --> Family: # 41 FV at Mutated Child #1 at Generation # 11 : 47244.57794468254 FV at Mutated Child #2 at Generation # 11 : 60154.12797054851 --> Family: # 42 FV at Mutated Child #1 at Generation # 11 : 246.86942184296416 FV at Mutated Child #2 at Generation # 11 : 1257.066978754095 --> Family: # 43 FV at Mutated Child #1 at Generation # 11 : 16.570908905368114 FV at Mutated Child #2 at Generation # 11 : 8.696337683447151 --> Family: # 44 FV at Mutated Child #1 at Generation # 11 : 55.89175705377994 FV at Mutated Child #2 at Generation # 11 : 218.05984418114588 --> Family: # 45 FV at Mutated Child #1 at Generation # 11 : 460.37606239978305 FV at Mutated Child #2 at Generation # 11 : 40.417438490954865 --> Family: # 46 FV at Mutated Child #1 at Generation # 11 : 150.41455257220574 FV at Mutated Child #2 at Generation # 11 : 30.98216944846205 --> Family: # 47 FV at Mutated Child #1 at Generation # 11 : 25.533049409377107 FV at Mutated Child #2 at Generation # 11 : 17.470119191746363 --> Family: # 48 FV at Mutated Child #1 at Generation # 11 : 2593.302883703753 FV at Mutated Child #2 at Generation # 11 : 2.6608320657014732 --> Family: # 49 FV at Mutated Child #1 at Generation # 11 : 89.476559876623 FV at Mutated Child #2 at Generation # 11 : 127.76018136094952 --> Family: # 50 FV at Mutated Child #1 at Generation # 11 : 3.5640000921921797 FV at Mutated Child #2 at Generation # 11 : 10.280033909290138 --> Family: # 51

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--> Family: # 52

FV at Mutated Child #1 at Generation # 11 : 38.586621463701825 FV at Mutated Child #2 at Generation # 11 : 16.752742504577043

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FV at Mutated Child #1 at Generation # 11 : 3.152434453011014
FV at Mutated Child #2 at Generation # 11 : 156.68486100474337
--> Family: # 53
FV at Mutated Child #1 at Generation # 11 : 97.38475217831072
FV at Mutated Child #2 at Generation # 11 : 109.40925004470739
--> Family: # 54
FV at Mutated Child #1 at Generation # 11 : 210.05637315691308
FV at Mutated Child #2 at Generation # 11 : 33.86645506485104
--> Family: # 55
FV at Mutated Child #1 at Generation # 11 : 157.82200468265114
FV at Mutated Child #2 at Generation # 11 : 508.4548625877989
--> Family: # 56
FV at Mutated Child #1 at Generation # 11 : 3.038013117825802
FV at Mutated Child #2 at Generation # 11 : 5.519526820963001
--> Family: # 57
FV at Mutated Child #1 at Generation # 11 : 30.414358797508424
FV at Mutated Child #2 at Generation # 11 : 2.3263660987815307
--> Family: # 58
FV at Mutated Child #1 at Generation # 11 : 26.271228366080376
FV at Mutated Child #2 at Generation # 11 : 7.587465072284528
--> Family: # 59
FV at Mutated Child #1 at Generation # 11 : 33.06492592430115
FV at Mutated Child #2 at Generation # 11 : 17.90544231310965
--> Family: # 60
FV at Mutated Child #1 at Generation # 11 : 214.73439812526127
FV at Mutated Child #2 at Generation # 11 : 4.902759760080111
--> Family: # 61
FV at Mutated Child #1 at Generation # 11 : 9.784737839096714
FV at Mutated Child #2 at Generation # 11 : 16.27428920568727
--> Family: # 62
FV at Mutated Child #1 at Generation # 11 : 148.03325666052325
FV at Mutated Child #2 at Generation # 11 : 206.52463188109508
--> Family: # 63
FV at Mutated Child #1 at Generation # 11 : 14.74823779422974
FV at Mutated Child #2 at Generation # 11 : 0.9242815994838659
--> Family: # 64
FV at Mutated Child #1 at Generation # 11 : 17.268208011684855
FV at Mutated Child #2 at Generation # 11 : 21.060656014400088
--> Family: # 65
FV at Mutated Child #1 at Generation # 11 : 149.7550538242567
FV at Mutated Child #2 at Generation # 11 : 149.8561860233574
--> Family: # 66
FV at Mutated Child #1 at Generation # 11 : 678.51749637617
FV at Mutated Child #2 at Generation # 11 : 50.39272158922395
--> Family: # 67
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FV at Mutated Child #1 at Generation # 11 : 17.802606101383645 FV at Mutated Child #2 at Generation # 11 : 9.75141717751053 --> Family: # 68 FV at Mutated Child #1 at Generation # 11 : 0.912513226878178 FV at Mutated Child #2 at Generation # 11 : 2.6483155897719945 --> Family: # 69 FV at Mutated Child #1 at Generation # 11 : 6.587123186648901 FV at Mutated Child #2 at Generation # 11 : 25.765661167379342 --> Family: # 70 FV at Mutated Child #1 at Generation # 11 : 10.465583447416371 FV at Mutated Child #2 at Generation # 11 : 0.7723977232593412 --> Family: # 71 FV at Mutated Child #1 at Generation # 11 : 4.433291246542092 FV at Mutated Child #2 at Generation # 11 : 18.171242403610748 --> Family: # 72 FV at Mutated Child #1 at Generation # 11 : 210.15312316235398 FV at Mutated Child #2 at Generation # 11 : 40.84875713575073 --> Family: # 73 FV at Mutated Child #1 at Generation # 11 : 12.2340004781019 FV at Mutated Child #2 at Generation # 11 : 43.64055211142429 --> Family: # 74 FV at Mutated Child #1 at Generation # 11 : 16.168577844418255 FV at Mutated Child #2 at Generation # 11 : 76.52312461318486 --> Family: # 75 FV at Mutated Child #1 at Generation # 11 : 1869.7661152801725 FV at Mutated Child #2 at Generation # 11 : 1933.0464049244708 --> Family: # 76 FV at Mutated Child #1 at Generation # 11 : 123.0733697644272 FV at Mutated Child #2 at Generation # 11 : 271.53375600765827 --> Family: # 77 FV at Mutated Child #1 at Generation # 11: 44.97929848777346 FV at Mutated Child #2 at Generation # 11 : 194.5402763843262 --> Family: # 78 FV at Mutated Child #1 at Generation # 11 : 8.543938378746814 FV at Mutated Child #2 at Generation # 11 : 4.741971557136984 --> Family: # 79 FV at Mutated Child #1 at Generation # 11 : 6.8885964583368295 FV at Mutated Child #2 at Generation # 11 : 25.410481859579992 --> Family: # 80 FV at Mutated Child #1 at Generation # 11 : 3.089123234004799 FV at Mutated Child #2 at Generation # 11 : 5.376428003434972 --> Generation: # 12 --> Family: # 1 FV at Mutated Child #1 at Generation # 12 : 3.9239957052609276 FV at Mutated Child #2 at Generation # 12 : 3.760610623758809 --> Family: # 2

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FV at Mutated Child #1 at Generation # 12 : 4.035606661940233 FV at Mutated Child #2 at Generation # 12 : 41.29254568329437 --> Family: # 3 FV at Mutated Child #1 at Generation # 12 : 7.004117373301828 FV at Mutated Child #2 at Generation # 12 : 3.1559055379890975 --> Family: # 4 FV at Mutated Child #1 at Generation # 12 : 14.350225671495862 FV at Mutated Child #2 at Generation # 12 : 378.65015031811794 --> Family: # 5 FV at Mutated Child #1 at Generation # 12 : 3217.202927674663 FV at Mutated Child #2 at Generation # 12 : 1234.1436168788475 --> Family: # 6 FV at Mutated Child #1 at Generation # 12 : 1.8616690351062894 FV at Mutated Child #2 at Generation # 12 : 0.4378776461288451 --> Family: # 7 FV at Mutated Child #1 at Generation # 12 : 43.930027344481275 FV at Mutated Child #2 at Generation # 12 : 18.4338057928028 --> Family: # 8 FV at Mutated Child #1 at Generation # 12 : 14.51175926094349 FV at Mutated Child #2 at Generation # 12 : 17.906668043759776 --> Family: # 9 FV at Mutated Child #1 at Generation # 12 : 16.230616880320543 FV at Mutated Child #2 at Generation # 12 : 32.648623931350556 --> Family: # 10 FV at Mutated Child #1 at Generation # 12 : 23.21591108070954 FV at Mutated Child #2 at Generation # 12 : 4.091857830778091 --> Family: # 11 FV at Mutated Child #1 at Generation # 12 : 1.5444604791955618 FV at Mutated Child #2 at Generation # 12 : 0.804010754727305 --> Family: # 12 FV at Mutated Child #1 at Generation # 12 : 7.09500514774672 FV at Mutated Child #2 at Generation # 12 : 19.877485663400527 --> Family: # 13 FV at Mutated Child #1 at Generation # 12 : 24989.824113711977 FV at Mutated Child #2 at Generation # 12 : 19190.21811185885 --> Family: # 14 FV at Mutated Child #1 at Generation # 12 : 2.4639388267342244 FV at Mutated Child #2 at Generation # 12 : 5.411873873299209 --> Family: # 15 FV at Mutated Child #1 at Generation # 12 : 1.8242770653738372 FV at Mutated Child #2 at Generation # 12 : 1.0353723899725298 --> Family: # 16 FV at Mutated Child #1 at Generation # 12 : 107.35282109662641 FV at Mutated Child #2 at Generation # 12 : 2.399128216663492 --> Family: # 17

FV at Mutated Child #1 at Generation # 12 : 4.317476380530698

FV at Mutated Child #2 at Generation # 12 : 1.71926255133861 --> Family: # 18 FV at Mutated Child #1 at Generation # 12 : 98.56508354605506 FV at Mutated Child #2 at Generation # 12 : 2.0336021086754568 --> Family: # 19 FV at Mutated Child #1 at Generation # 12 : 10.465583447416371 FV at Mutated Child #2 at Generation # 12 : 23.551651316937694 --> Family: # 20 FV at Mutated Child #1 at Generation # 12 : 2.0388053164450146 FV at Mutated Child #2 at Generation # 12 : 2.732609524991831 --> Family: # 21 FV at Mutated Child #1 at Generation # 12 : 59209.5174548454 FV at Mutated Child #2 at Generation # 12 : 35881.27630260744 --> Family: # 22 FV at Mutated Child #1 at Generation # 12: 499.8553760737345 FV at Mutated Child #2 at Generation # 12 : 2.4510269763076957 --> Family: # 23 FV at Mutated Child #1 at Generation # 12 : 23.5557264227559 FV at Mutated Child #2 at Generation # 12 : 2.571167070329989 --> Family: # 24 FV at Mutated Child #1 at Generation # 12 : 10.51722968954764 FV at Mutated Child #2 at Generation # 12 : 3.8722517611362006 --> Family: # 25 FV at Mutated Child #1 at Generation # 12 : 16.629931798692553 FV at Mutated Child #2 at Generation # 12 : 21.96004664434306 --> Family: # 26 FV at Mutated Child #1 at Generation # 12 : 6.698412152310047 FV at Mutated Child #2 at Generation # 12 : 0.5755441616738695 --> Family: # 27 FV at Mutated Child #1 at Generation # 12 : 2260.01349974794 FV at Mutated Child #2 at Generation # 12 : 38.86204970773448 --> Family: # 28 FV at Mutated Child #1 at Generation # 12: 4.829931114641855 FV at Mutated Child #2 at Generation # 12 : 6.7108034134442285 --> Family: # 29 FV at Mutated Child #1 at Generation # 12: 48.16853199040712 FV at Mutated Child #2 at Generation # 12 : 0.5815265952434143 --> Family: # 30 FV at Mutated Child #1 at Generation # 12 : 12.55633242038185 FV at Mutated Child #2 at Generation # 12 : 529.6000460657755 --> Family: # 31 FV at Mutated Child #1 at Generation # 12 : 5.780440374063897 FV at Mutated Child #2 at Generation # 12 : 12.49761271250971 --> Family: # 32 FV at Mutated Child #1 at Generation # 12 : 534.9136313842965 FV at Mutated Child #2 at Generation # 12 : 141.61483146905357

--> Family: # 33

FV at Mutated Child #1 at Generation # 12 : 35.51388673294955 FV at Mutated Child #2 at Generation # 12 : 3.437445163426389 --> Family: # 34 FV at Mutated Child #1 at Generation # 12 : 17.92453712154362 FV at Mutated Child #2 at Generation # 12 : 4.4174346741555075 --> Family: # 35

FV at Mutated Child #1 at Generation # 12 : 15.409654736255982 FV at Mutated Child #2 at Generation # 12 : 156.49810760035317 --> Family: # 36

FV at Mutated Child #1 at Generation # 12 : 2.7453523796161385 FV at Mutated Child #2 at Generation # 12 : 57.41016173773345 --> Family: # 37

FV at Mutated Child #1 at Generation # 12 : 1.7295429040225652 FV at Mutated Child #2 at Generation # 12 : 14.670842206338078 --> Family: # 38

FV at Mutated Child #1 at Generation # 12 : 551.5109545047887 FV at Mutated Child #2 at Generation # 12 : 39.35688982533302 --> Family: # 39

FV at Mutated Child #1 at Generation # 12 : 1.7093354102973704 FV at Mutated Child #2 at Generation # 12 : 36.444800812906855 --> Family: # 40

FV at Mutated Child #1 at Generation # 12 : 13.186056501702177 FV at Mutated Child #2 at Generation # 12 : 1.3788351433940567 --> Family: # 41

FV at Mutated Child #1 at Generation # 12 : 3.357098859322246 FV at Mutated Child #2 at Generation # 12 : 0.8859416427674769 --> Family: # 42

FV at Mutated Child #1 at Generation # 12 : 1.0273834879369375 FV at Mutated Child #2 at Generation # 12 : 0.8066692702067089 --> Family: # 43

FV at Mutated Child #1 at Generation # 12 : 111.51977829967602 FV at Mutated Child #2 at Generation # 12 : 92.88065725581829 --> Family: # 44

FV at Mutated Child #1 at Generation # 12 : 114.67463471527384 FV at Mutated Child #2 at Generation # 12 : 1.3918441953264007 --> Family: # 45

FV at Mutated Child #1 at Generation # 12 : 38.30275505919145 FV at Mutated Child #2 at Generation # 12 : 2.2054578848897455 --> Family: # 46

FV at Mutated Child #1 at Generation # 12 : 12.714651012297995 FV at Mutated Child #2 at Generation # 12 : 1.6321227971544758 --> Family: # 47

FV at Mutated Child #1 at Generation # 12 : 19.87237425909842 FV at Mutated Child #2 at Generation # 12 : 11.065361981039985 --> Family: # 48

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FV at Mutated Child #1 at Generation # 12 : 0.6384234750853309
FV at Mutated Child #2 at Generation # 12 : 2.4329175333100164
--> Family: # 49
FV at Mutated Child #1 at Generation # 12 : 1.76821144994414
FV at Mutated Child #2 at Generation # 12 : 0.4165899693322879
--> Family: # 50
FV at Mutated Child #1 at Generation # 12 : 602.7151766860991
FV at Mutated Child #2 at Generation # 12 : 24.09303051806646
--> Family: # 51
FV at Mutated Child #1 at Generation # 12: 0.5153357696925984
FV at Mutated Child #2 at Generation # 12 : 13.090611466210403
--> Family: # 52
FV at Mutated Child #1 at Generation # 12 : 17.280568238633414
FV at Mutated Child #2 at Generation # 12 : 166.172863229441
--> Family: # 53
FV at Mutated Child #1 at Generation # 12 : 99.05498335570186
FV at Mutated Child #2 at Generation # 12 : 14.04996077333447
--> Family: # 54
FV at Mutated Child #1 at Generation # 12 : 2.505026680977049
FV at Mutated Child #2 at Generation # 12 : 0.8868705662495762
--> Family: # 55
FV at Mutated Child #1 at Generation # 12 : 2180.284863346527
FV at Mutated Child #2 at Generation # 12 : 1981.995970061967
--> Family: # 56
FV at Mutated Child #1 at Generation # 12 : 4.424926442938027
FV at Mutated Child #2 at Generation # 12 : 0.5792058754693119
--> Family: # 57
FV at Mutated Child #1 at Generation # 12 : 0.4167940231977678
FV at Mutated Child #2 at Generation # 12 : 0.6842420201436658
--> Family: # 58
FV at Mutated Child #1 at Generation # 12 : 2683.4268803233817
FV at Mutated Child #2 at Generation # 12 : 1960.3230256265736
--> Family: # 59
FV at Mutated Child #1 at Generation # 12 : 0.7714770459630296
FV at Mutated Child #2 at Generation # 12 : 488.7622913832162
--> Family: # 60
FV at Mutated Child #1 at Generation # 12 : 1.376960434060733
FV at Mutated Child #2 at Generation # 12 : 29.89698139332384
--> Family: # 61
FV at Mutated Child #1 at Generation # 12 : 54425.219053388806
FV at Mutated Child #2 at Generation # 12 : 37842.4389379938
--> Family: # 62
FV at Mutated Child #1 at Generation # 12 : 58.512001227971226
FV at Mutated Child #2 at Generation # 12 : 2.1457355525378015
--> Family: # 63
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FV at Mutated Child #1 at Generation # 12 : 0.5318576863978821 FV at Mutated Child #2 at Generation # 12 : 45.84703065875373 --> Family: # 64 FV at Mutated Child #1 at Generation # 12 : 2404.6188305688265 FV at Mutated Child #2 at Generation # 12 : 2133.981984446999 --> Family: # 65 FV at Mutated Child #1 at Generation # 12 : 10.44493440238956 FV at Mutated Child #2 at Generation # 12 : 1.174543738664429 --> Family: # 66 FV at Mutated Child #1 at Generation # 12 : 11.222508732112056 FV at Mutated Child #2 at Generation # 12 : 0.6839374167924768 --> Family: # 67 FV at Mutated Child #1 at Generation # 12: 0.604938003464086 FV at Mutated Child #2 at Generation # 12 : 24.422250204332755 --> Family: # 68 FV at Mutated Child #1 at Generation # 12 : 40415.47764809637 FV at Mutated Child #2 at Generation # 12 : 58701.29564999676 --> Family: # 69 FV at Mutated Child #1 at Generation # 12 : 0.4369642201979603 FV at Mutated Child #2 at Generation # 12 : 19.391389616029578 --> Family: # 70 FV at Mutated Child #1 at Generation # 12 : 2.619433338593331 FV at Mutated Child #2 at Generation # 12 : 2.2921022156797957 --> Family: # 71 FV at Mutated Child #1 at Generation # 12 : 4.108298136903874 FV at Mutated Child #2 at Generation # 12 : 1.4392309539881174 --> Family: # 72 FV at Mutated Child #1 at Generation # 12 : 1.1979749322746103 FV at Mutated Child #2 at Generation # 12 : 15.119802075533448 --> Family: # 73 FV at Mutated Child #1 at Generation # 12 : 77.84058723873345 FV at Mutated Child #2 at Generation # 12 : 10.825887399116134 --> Family: # 74 FV at Mutated Child #1 at Generation # 12 : 1.125131843368449 FV at Mutated Child #2 at Generation # 12 : 1.831135351271202 --> Family: # 75 FV at Mutated Child #1 at Generation # 12 : 40.37871202527522 FV at Mutated Child #2 at Generation # 12 : 0.5455515827817249 --> Family: # 76 FV at Mutated Child #1 at Generation # 12 : 1.927972044246231 FV at Mutated Child #2 at Generation # 12 : 16.915652999336864 --> Family: # 77 FV at Mutated Child #1 at Generation # 12 : 20.096479067723497 FV at Mutated Child #2 at Generation # 12 : 2274.6810443580193 --> Family: # 78 FV at Mutated Child #1 at Generation # 12 : 1.6046545483312986

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FV at Mutated Child #2 at Generation # 12 : 170.4580995520334 --> Family: # 79 FV at Mutated Child #1 at Generation # 12 : 13.476435589166432 FV at Mutated Child #2 at Generation # 12 : 519.4872454342927 --> Family: # 80 FV at Mutated Child #1 at Generation # 12 : 305.8085574590102 FV at Mutated Child #2 at Generation # 12 : 20.040737472447848 --> Generation: # 13 --> Family: # 1 FV at Mutated Child #1 at Generation # 13 : 1483.3247336480758 FV at Mutated Child #2 at Generation # 13 : 2308.6803411914475 --> Family: # 2 FV at Mutated Child #1 at Generation # 13 : 541.4194585887326 FV at Mutated Child #2 at Generation # 13 : 566.3144101660125 --> Family: # 3 FV at Mutated Child #1 at Generation # 13 : 108.82391616270105 FV at Mutated Child #2 at Generation # 13 : 6.5583459588164645 --> Family: # 4 FV at Mutated Child #1 at Generation # 13 : 151.23866506695813 FV at Mutated Child #2 at Generation # 13 : 0.8197401807410104 --> Family: # 5 FV at Mutated Child #1 at Generation # 13 : 570.0330630776735 FV at Mutated Child #2 at Generation # 13 : 33.82066090810654 --> Family: # 6 FV at Mutated Child #1 at Generation # 13 : 2165.632760155959 FV at Mutated Child #2 at Generation # 13 : 3714.0844774782213 --> Family: # 7 FV at Mutated Child #1 at Generation # 13 : 591.679554816028 FV at Mutated Child #2 at Generation # 13 : 5.026001968999115 --> Family: # 8 FV at Mutated Child #1 at Generation # 13 : 16.688717568255086 FV at Mutated Child #2 at Generation # 13 : 9.321440713292727 --> Family: # 9 FV at Mutated Child #1 at Generation # 13 : 618.2163608861845 FV at Mutated Child #2 at Generation # 13 : 55.25054950617184 --> Family: # 10 FV at Mutated Child #1 at Generation # 13 : 604.2774990302162 FV at Mutated Child #2 at Generation # 13 : 6.56188260367518 --> Family: # 11 FV at Mutated Child #1 at Generation # 13 : 129.75503030170222 FV at Mutated Child #2 at Generation # 13 : 18.789017129697513 --> Family: # 12 FV at Mutated Child #1 at Generation # 13 : 8.113683350637984 FV at Mutated Child #2 at Generation # 13 : 1.2257327350381095 --> Family: # 13 FV at Mutated Child #1 at Generation # 13 : 1.6513115395007345

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FV at Mutated Child #2 at Generation # 13 : 3.2285764580401364 --> Family: # 14 FV at Mutated Child #1 at Generation # 13 : 15.677189805796004 FV at Mutated Child #2 at Generation # 13 : 6.578431123129387 --> Family: # 15 FV at Mutated Child #1 at Generation # 13 : 12.504648663119502 FV at Mutated Child #2 at Generation # 13 : 538.149078274094 --> Family: # 16 FV at Mutated Child #1 at Generation # 13 : 93.4251857586959 FV at Mutated Child #2 at Generation # 13 : 21.384525393418283 --> Family: # 17 FV at Mutated Child #1 at Generation # 13 : 1.1715360702685576 FV at Mutated Child #2 at Generation # 13 : 2.678122416559409 --> Family: # 18 FV at Mutated Child #1 at Generation # 13 : 31.08230961768345 FV at Mutated Child #2 at Generation # 13 : 11.53520769829883 --> Family: # 19 FV at Mutated Child #1 at Generation # 13 : 14.93827980194147 FV at Mutated Child #2 at Generation # 13 : 42.12716177326472 --> Family: # 20 FV at Mutated Child #1 at Generation # 13 : 2462.5673787478922 FV at Mutated Child #2 at Generation # 13 : 7.0878281772579665 --> Family: # 21 FV at Mutated Child #1 at Generation # 13 : 1.9144142199781324 FV at Mutated Child #2 at Generation # 13 : 7.4882543083978765 --> Family: # 22 FV at Mutated Child #1 at Generation # 13 : 13.029523644238674 FV at Mutated Child #2 at Generation # 13 : 33.540257113773635 --> Family: # 23 FV at Mutated Child #1 at Generation # 13 : 9.99474835067388 FV at Mutated Child #2 at Generation # 13 : 1.442791479708935 --> Family: # 24 FV at Mutated Child #1 at Generation # 13 : 3.9547062434383045 FV at Mutated Child #2 at Generation # 13 : 633.9041026487873 --> Family: # 25 FV at Mutated Child #1 at Generation # 13 : 7.527504653842068 FV at Mutated Child #2 at Generation # 13 : 9.083652613287587 --> Family: # 26 FV at Mutated Child #1 at Generation # 13 : 9.24841224007923 FV at Mutated Child #2 at Generation # 13 : 155.0404596086351 --> Family: # 27 FV at Mutated Child #1 at Generation # 13 : 12.453598021904458 FV at Mutated Child #2 at Generation # 13 : 462.85238724410067 --> Family: # 28 FV at Mutated Child #1 at Generation # 13 : 1.5719718759673191 FV at Mutated Child #2 at Generation # 13 : 7.204266602190394

--> Family: # 29 --> Family: # 30

FV at Mutated Child #1 at Generation # 13 : 112.93977355609411 FV at Mutated Child #2 at Generation # 13 : 5.675687269695216

FV at Mutated Child #1 at Generation # 13 : 16.663191565583652 FV at Mutated Child #2 at Generation # 13 : 159.53787648376098 --> Family: # 31

FV at Mutated Child #1 at Generation # 13 : 7.780869931699335 FV at Mutated Child #2 at Generation # 13 : 10.893035771080006 --> Family: # 32

FV at Mutated Child #1 at Generation # 13 : 397.1256419408182 FV at Mutated Child #2 at Generation # 13 : 76.0584800211436 --> Family: # 33

FV at Mutated Child #1 at Generation # 13 : 4.9998763749909685 FV at Mutated Child #2 at Generation # 13 : 37.54163506545572 --> Family: # 34

FV at Mutated Child #1 at Generation # 13 : 622.6951763177228 FV at Mutated Child #2 at Generation # 13 : 608.6643930625592 --> Family: # 35

FV at Mutated Child #1 at Generation # 13 : 168.0844255347249 FV at Mutated Child #2 at Generation # 13 : 35.77873530587175 --> Family: # 36

FV at Mutated Child #1 at Generation # 13 : 8.937735438194677 FV at Mutated Child #2 at Generation # 13 : 21.236944250059143

--> Family: # 37

FV at Mutated Child #1 at Generation # 13 : 9.745920611140813 FV at Mutated Child #2 at Generation # 13 : 25.14087210422166 --> Family: # 38

FV at Mutated Child #1 at Generation # 13 : 34.39529416816757 FV at Mutated Child #2 at Generation # 13 : 12.032579411320965 --> Family: # 39

FV at Mutated Child #1 at Generation # 13 : 35.580138384079376 FV at Mutated Child #2 at Generation # 13 : 131.83295127686884 --> Family: # 40

FV at Mutated Child #1 at Generation # 13 : 26.289467987051093 FV at Mutated Child #2 at Generation # 13 : 9.380947646823575 --> Family: # 41

FV at Mutated Child #1 at Generation # 13 : 34.359445740751404 FV at Mutated Child #2 at Generation # 13 : 1.184424529557484 --> Family: # 42

FV at Mutated Child #1 at Generation # 13 : 13.116341205742344 FV at Mutated Child #2 at Generation # 13 : 8.221334077213193 --> Family: # 43

FV at Mutated Child #1 at Generation # 13 : 688.9382666286854 FV at Mutated Child #2 at Generation # 13 : 23.73514883615519 --> Family: # 44

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FV at Mutated Child #1 at Generation # 13 : 129.49809394280052
FV at Mutated Child #2 at Generation # 13 : 4.4067345734784
--> Family: # 45
FV at Mutated Child #1 at Generation # 13 : 4.889093612621936
FV at Mutated Child #2 at Generation # 13 : 1.8935975806925158
--> Family: # 46
FV at Mutated Child #1 at Generation # 13 : 11.174713781056736
FV at Mutated Child #2 at Generation # 13 : 3.584270197381916
--> Family: # 47
FV at Mutated Child #1 at Generation # 13 : 29.61569371058927
FV at Mutated Child #2 at Generation # 13 : 2489.9344204077684
--> Family: # 48
FV at Mutated Child #1 at Generation # 13 : 499.97619305411104
FV at Mutated Child #2 at Generation # 13 : 43.235772189511714
--> Family: # 49
FV at Mutated Child #1 at Generation # 13 : 23.334611046715004
FV at Mutated Child #2 at Generation # 13 : 15.826438970935223
--> Family: # 50
FV at Mutated Child #1 at Generation # 13 : 3.975602892602822
FV at Mutated Child #2 at Generation # 13 : 26.354621982417385
--> Family: # 51
FV at Mutated Child #1 at Generation # 13 : 44.1586053393422
FV at Mutated Child #2 at Generation # 13 : 590.2222997526911
--> Family: # 52
FV at Mutated Child #1 at Generation # 13 : 36.811428633921786
FV at Mutated Child #2 at Generation # 13 : 4.334054348802447
--> Family: # 53
FV at Mutated Child #1 at Generation # 13 : 78.86276464258651
FV at Mutated Child #2 at Generation # 13 : 161.21494309860267
--> Family: # 54
FV at Mutated Child #1 at Generation # 13 : 5.904624907342569
FV at Mutated Child #2 at Generation # 13 : 2.1051304710251872
--> Family: # 55
FV at Mutated Child #1 at Generation # 13 : 546.1369574021264
FV at Mutated Child #2 at Generation # 13 : 1.0681622283003673
--> Family: # 56
FV at Mutated Child #1 at Generation # 13 : 3.685272165529321
FV at Mutated Child #2 at Generation # 13 : 69.2231595901361
--> Family: # 57
FV at Mutated Child #1 at Generation # 13 : 36.38886605525786
FV at Mutated Child #2 at Generation # 13 : 9.976699936114965
--> Family: # 58
FV at Mutated Child #1 at Generation # 13 : 127.15807160507129
FV at Mutated Child #2 at Generation # 13 : 1.032868931027442
--> Family: # 59
```

FV at Mutated Child #1 at Generation # 13 : 9.639141468682672 FV at Mutated Child #2 at Generation # 13 : 16.729860187849805 --> Family: # 60 FV at Mutated Child #1 at Generation # 13 : 1.82509650183109 FV at Mutated Child #2 at Generation # 13 : 9.604294193620513 --> Family: # 61 FV at Mutated Child #1 at Generation # 13 : 692.6278155927886 FV at Mutated Child #2 at Generation # 13 : 11.878703942953276 --> Family: # 62 FV at Mutated Child #1 at Generation # 13 : 5.636856367233034 FV at Mutated Child #2 at Generation # 13 : 4.526648573151445 --> Family: # 63 FV at Mutated Child #1 at Generation # 13 : 3.4358686657163116 FV at Mutated Child #2 at Generation # 13 : 2.535543221397796 --> Family: # 64 FV at Mutated Child #1 at Generation # 13 : 7.768488930165402 FV at Mutated Child #2 at Generation # 13 : 0.5991943860535982 --> Family: # 65 FV at Mutated Child #1 at Generation # 13 : 129.4771372994065 FV at Mutated Child #2 at Generation # 13 : 117.17935265780083 --> Family: # 66 FV at Mutated Child #1 at Generation # 13 : 14.95346227115489 FV at Mutated Child #2 at Generation # 13 : 5.9802476983754005 --> Family: # 67 FV at Mutated Child #1 at Generation # 13 : 66.15922637650607 FV at Mutated Child #2 at Generation # 13 : 27.038557808054126 --> Family: # 68 FV at Mutated Child #1 at Generation # 13 : 73.01893840488368 FV at Mutated Child #2 at Generation # 13 : 36.08599550510686 --> Family: # 69 FV at Mutated Child #1 at Generation # 13 : 72.56492224068681 FV at Mutated Child #2 at Generation # 13 : 14.30745012477063 --> Family: # 70 FV at Mutated Child #1 at Generation # 13 : 59.835272606318426 FV at Mutated Child #2 at Generation # 13 : 7.346767353950028 --> Family: # 71 FV at Mutated Child #1 at Generation # 13 : 4.09073131171677 FV at Mutated Child #2 at Generation # 13 : 547.2477696176995 --> Family: # 72 FV at Mutated Child #1 at Generation # 13 : 0.9210396001116186 FV at Mutated Child #2 at Generation # 13 : 1.0055724272460835 --> Family: # 73 FV at Mutated Child #1 at Generation # 13 : 162.24127506940835 FV at Mutated Child #2 at Generation # 13 : 150.09424434975568 --> Family: # 74 FV at Mutated Child #1 at Generation # 13 : 1550.0930148515934

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FV at Mutated Child #2 at Generation # 13 : 2338.845143123414 --> Family: # 75 FV at Mutated Child #1 at Generation # 13 : 9.909254886519173 FV at Mutated Child #2 at Generation # 13 : 590.81544540605 --> Family: # 76 FV at Mutated Child #1 at Generation # 13 : 151.5476047341777 FV at Mutated Child #2 at Generation # 13 : 446.1883804573451 --> Family: # 77 FV at Mutated Child #1 at Generation # 13 : 8.861444871897383 FV at Mutated Child #2 at Generation # 13 : 2.468837468666545 --> Family: # 78 FV at Mutated Child #1 at Generation # 13 : 5.298411065273059 FV at Mutated Child #2 at Generation # 13 : 14.724779307690945 --> Family: # 79 FV at Mutated Child #1 at Generation # 13 : 32.125291823249675 FV at Mutated Child #2 at Generation # 13 : 38.23425832397513 --> Family: # 80 FV at Mutated Child #1 at Generation # 13 : 43.66689500988317 FV at Mutated Child #2 at Generation # 13 : 6.02480003853295 --> Generation: # 14 --> Family: # 1 FV at Mutated Child #1 at Generation # 14 : 14.250742001249757 FV at Mutated Child #2 at Generation # 14 : 1.7394707065491433 --> Family: # 2 FV at Mutated Child #1 at Generation # 14 : 2.1558184745011655 FV at Mutated Child #2 at Generation # 14 : 2.136799578276538 --> Family: # 3 FV at Mutated Child #1 at Generation # 14 : 3216.272073296412 FV at Mutated Child #2 at Generation # 14 : 2296.20335259545 --> Family: # 4 FV at Mutated Child #1 at Generation # 14 : 1.1240063830989728 FV at Mutated Child #2 at Generation # 14 : 447.2864146713313 --> Family: # 5 FV at Mutated Child #1 at Generation # 14 : 0.969199607787234 FV at Mutated Child #2 at Generation # 14 : 1.3238665568580048 --> Family: # 6 FV at Mutated Child #1 at Generation # 14 : 7.529880752191616 FV at Mutated Child #2 at Generation # 14 : 58.02860042600363 --> Family: # 7 FV at Mutated Child #1 at Generation # 14 : 0.31399196808657087 FV at Mutated Child #2 at Generation # 14 : 0.4387589415803015 --> Family: # 8 FV at Mutated Child #1 at Generation # 14 : 1.495372841869933 FV at Mutated Child #2 at Generation # 14 : 1.6552849854135652 --> Family: # 9 FV at Mutated Child #1 at Generation # 14 : 2.037948310245321

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FV at Mutated Child #2 at Generation # 14 : 0.5265505807202003 --> Family: # 10 FV at Mutated Child #1 at Generation # 14 : 0.4815225223926216 FV at Mutated Child #2 at Generation # 14 : 34.69596422440338 --> Family: # 11 FV at Mutated Child #1 at Generation # 14 : 4.744532436943452 FV at Mutated Child #2 at Generation # 14 : 0.1935059121645824 --> Family: # 12 FV at Mutated Child #1 at Generation # 14 : 1.6135759588435117 FV at Mutated Child #2 at Generation # 14 : 7.126544669632507 --> Family: # 13 FV at Mutated Child #1 at Generation # 14 : 3.524724759866704 FV at Mutated Child #2 at Generation # 14 : 127.94517151054933 --> Family: # 14 FV at Mutated Child #1 at Generation # 14 : 12.840216267726422 FV at Mutated Child #2 at Generation # 14 : 8.60346190329864 --> Family: # 15 FV at Mutated Child #1 at Generation # 14 : 0.5386992383476217 FV at Mutated Child #2 at Generation # 14 : 4.733334424870095 --> Family: # 16 FV at Mutated Child #1 at Generation # 14 : 2.151981981576723 FV at Mutated Child #2 at Generation # 14 : 2.4235861419304854 --> Family: # 17 FV at Mutated Child #1 at Generation # 14 : 4.788146183319469 FV at Mutated Child #2 at Generation # 14 : 167.07091142924813 --> Family: # 18 FV at Mutated Child #1 at Generation # 14 : 37.75532699695855 FV at Mutated Child #2 at Generation # 14 : 14.505262946898927 --> Family: # 19 FV at Mutated Child #1 at Generation # 14 : 5.720760354480655 FV at Mutated Child #2 at Generation # 14 : 12.94085730229339 --> Family: # 20 FV at Mutated Child #1 at Generation # 14 : 1.471626418988221 FV at Mutated Child #2 at Generation # 14 : 23.844230447923728 --> Family: # 21 FV at Mutated Child #1 at Generation # 14 : 3.394057074312263 FV at Mutated Child #2 at Generation # 14 : 1.7062338397425985 --> Family: # 22 FV at Mutated Child #1 at Generation # 14 : 1.1073618431579746 FV at Mutated Child #2 at Generation # 14 : 3.905068772030368 --> Family: # 23 FV at Mutated Child #1 at Generation # 14 : 52137.982055754896 FV at Mutated Child #2 at Generation # 14 : 49324.33682308442 --> Family: # 24 FV at Mutated Child #1 at Generation # 14 : 0.6030474622940696 FV at Mutated Child #2 at Generation # 14 : 1.9394920577005998

--> Family: # 25

FV at Mutated Child #1 at Generation # 14 : 464.79571191642566 FV at Mutated Child #2 at Generation # 14 : 0.8417871625886937

--> Family: # 26

FV at Mutated Child #1 at Generation # 14 : 4.739276617448531 FV at Mutated Child #2 at Generation # 14 : 7.5774379739916995

--> Family: # 27

FV at Mutated Child #1 at Generation # 14 : 15.128663598019365 FV at Mutated Child #2 at Generation # 14 : 16.975880994435414 --> Family: # 28

FV at Mutated Child #1 at Generation # 14 : 25.194084666258387 FV at Mutated Child #2 at Generation # 14 : 509.18316797491116 --> Family: # 29

FV at Mutated Child #1 at Generation # 14 : 2942.55752221861 FV at Mutated Child #2 at Generation # 14 : 2500.2540362573745 --> Family: # 30

FV at Mutated Child #1 at Generation # 14 : 1.6258344383091363 FV at Mutated Child #2 at Generation # 14 : 13.06378934803245 --> Family: # 31

FV at Mutated Child #1 at Generation # 14 : 1.501875802126437 FV at Mutated Child #2 at Generation # 14 : 5.8218135060738305 --> Family: # 32

FV at Mutated Child #1 at Generation # 14 : 0.6388272157765298 FV at Mutated Child #2 at Generation # 14 : 0.7292827687006235 --> Family: # 33

FV at Mutated Child #1 at Generation # 14 : 22.26384599065685 FV at Mutated Child #2 at Generation # 14 : 14.966659596517522 --> Family: # 34

FV at Mutated Child #1 at Generation # 14 : 1.4197769112734235 FV at Mutated Child #2 at Generation # 14 : 39.85138293673413 --> Family: # 35

FV at Mutated Child #1 at Generation # 14 : 22.349861352520975 FV at Mutated Child #2 at Generation # 14 : 5.960660505899557 --> Family: # 36

FV at Mutated Child #1 at Generation # 14 : 4.235996476545561 FV at Mutated Child #2 at Generation # 14 : 0.5523479932767272 --> Family: # 37

FV at Mutated Child #1 at Generation # 14 : 19.90926588843667 FV at Mutated Child #2 at Generation # 14 : 4.346274279699804 --> Family: # 38

FV at Mutated Child #1 at Generation # 14 : 0.8133657440951405 FV at Mutated Child #2 at Generation # 14 : 17.625102650507745 --> Family: # 39

FV at Mutated Child #1 at Generation # 14 : 510.08927732985694 FV at Mutated Child #2 at Generation # 14 : 365.3985829214113 --> Family: # 40

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FV at Mutated Child #1 at Generation # 14 : 1.464252292621696
FV at Mutated Child #2 at Generation # 14 : 2206.3112804811362
--> Family: # 41
FV at Mutated Child #1 at Generation # 14: 0.6129214167218848
FV at Mutated Child #2 at Generation # 14 : 1.0404863842952294
--> Family: # 42
FV at Mutated Child #1 at Generation # 14 : 43.49210539613949
FV at Mutated Child #2 at Generation # 14 : 1.7085773047100146
--> Family: # 43
FV at Mutated Child #1 at Generation # 14 : 41.65988541690351
FV at Mutated Child #2 at Generation # 14 : 0.5991943860535982
--> Family: # 44
FV at Mutated Child #1 at Generation # 14 : 208.9369124393495
FV at Mutated Child #2 at Generation # 14 : 3.979014233371736
--> Family: # 45
FV at Mutated Child #1 at Generation # 14 : 2.7343938074887713
FV at Mutated Child #2 at Generation # 14 : 99.12129693689994
--> Family: # 46
FV at Mutated Child #1 at Generation # 14 : 0.628088431195575
FV at Mutated Child #2 at Generation # 14 : 0.5941222916314471
--> Family: # 47
FV at Mutated Child #1 at Generation # 14: 0.5785651814574688
FV at Mutated Child #2 at Generation # 14 : 21.597355526678296
--> Family: # 48
FV at Mutated Child #1 at Generation # 14 : 19.786225068141217
FV at Mutated Child #2 at Generation # 14 : 32.59345259900307
--> Family: # 49
FV at Mutated Child #1 at Generation # 14 : 7.065118681538418
FV at Mutated Child #2 at Generation # 14 : 101.24909727659316
--> Family: # 50
FV at Mutated Child #1 at Generation # 14 : 68.13927002342972
FV at Mutated Child #2 at Generation # 14 : 68.13927002342972
--> Family: # 51
FV at Mutated Child #1 at Generation # 14 : 16.327584895046858
FV at Mutated Child #2 at Generation # 14 : 2.136799578276538
--> Family: # 52
FV at Mutated Child #1 at Generation # 14 : 0.7786172410747796
FV at Mutated Child #2 at Generation # 14 : 1.2231516673104124
--> Family: # 53
FV at Mutated Child #1 at Generation # 14 : 3.2953821652397837
FV at Mutated Child #2 at Generation # 14 : 1.5227139690358436
--> Family: # 54
FV at Mutated Child #1 at Generation # 14 : 58.732549788542855
FV at Mutated Child #2 at Generation # 14 : 49.25312348873196
--> Family: # 55
```

FV at Mutated Child #1 at Generation # 14 : 86.4898536618523 FV at Mutated Child #2 at Generation # 14 : 7.595164070433886 --> Family: # 56 FV at Mutated Child #1 at Generation # 14 : 1.2814161211693822 FV at Mutated Child #2 at Generation # 14 : 3.434571473370906 --> Family: # 57 FV at Mutated Child #1 at Generation # 14 : 38.91413078247065 FV at Mutated Child #2 at Generation # 14 : 1.3514034508816553 --> Family: # 58 FV at Mutated Child #1 at Generation # 14 : 47.94735075258331 FV at Mutated Child #2 at Generation # 14 : 28.784304444136236 --> Family: # 59 FV at Mutated Child #1 at Generation # 14 : 5.0516985748227725 FV at Mutated Child #2 at Generation # 14 : 1.8994370142893762 --> Family: # 60 FV at Mutated Child #1 at Generation # 14 : 10.204793539176299 FV at Mutated Child #2 at Generation # 14 : 105.6236401178983 --> Family: # 61 FV at Mutated Child #1 at Generation # 14 : 8.041117735748239 FV at Mutated Child #2 at Generation # 14 : 13.318363052994293 --> Family: # 62 FV at Mutated Child #1 at Generation # 14 : 2283.194323611954 FV at Mutated Child #2 at Generation # 14 : 2411.5034197179466 --> Family: # 63 FV at Mutated Child #1 at Generation # 14 : 8.393099916033982 FV at Mutated Child #2 at Generation # 14 : 6.810370029543687 --> Family: # 64 FV at Mutated Child #1 at Generation # 14 : 2.5756484506163897 FV at Mutated Child #2 at Generation # 14 : 96.23274083243722 --> Family: # 65 FV at Mutated Child #1 at Generation # 14 : 16.983477656219446 FV at Mutated Child #2 at Generation # 14 : 5.456942789465842 --> Family: # 66 FV at Mutated Child #1 at Generation # 14 : 831.7997801385716 FV at Mutated Child #2 at Generation # 14 : 1529.6340909108376 --> Family: # 67 FV at Mutated Child #1 at Generation # 14 : 7.56343106028732 FV at Mutated Child #2 at Generation # 14 : 6.576831140416875 --> Family: # 68 FV at Mutated Child #1 at Generation # 14 : 0.5280337047153596 FV at Mutated Child #2 at Generation # 14 : 11.291288721912828 --> Family: # 69 FV at Mutated Child #1 at Generation # 14 : 3.388495752854598 FV at Mutated Child #2 at Generation # 14 : 20.340130373381186

FV at Mutated Child #1 at Generation # 14 : 1.1872181615350001

--> Family: # 70

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FV at Mutated Child #2 at Generation # 14 : 0.6067859326538685 --> Family: # 71 FV at Mutated Child #1 at Generation # 14 : 0.8542421486796378 FV at Mutated Child #2 at Generation # 14 : 0.8631809668401395 --> Family: # 72 FV at Mutated Child #1 at Generation # 14 : 5.575593136092037 FV at Mutated Child #2 at Generation # 14 : 12.713515140934094 --> Family: # 73 FV at Mutated Child #1 at Generation # 14 : 5.758949253471549 FV at Mutated Child #2 at Generation # 14 : 1.930143409871987 --> Family: # 74 FV at Mutated Child #1 at Generation # 14 : 0.5815265952434143 FV at Mutated Child #2 at Generation # 14 : 80.56602777535915 --> Family: # 75 FV at Mutated Child #1 at Generation # 14 : 0.5742131691842997 FV at Mutated Child #2 at Generation # 14 : 23.684064298872364 --> Family: # 76 FV at Mutated Child #1 at Generation # 14 : 3.483748244441066 FV at Mutated Child #2 at Generation # 14 : 111.72093667796169 --> Family: # 77 FV at Mutated Child #1 at Generation # 14: 43.7980431645418 FV at Mutated Child #2 at Generation # 14 : 0.7787329166745789 --> Family: # 78 FV at Mutated Child #1 at Generation # 14 : 107.52429027933563 FV at Mutated Child #2 at Generation # 14 : 0.6513821959711177 --> Family: # 79 FV at Mutated Child #1 at Generation # 14 : 63.49654827730107 FV at Mutated Child #2 at Generation # 14 : 218.99136193903752 --> Family: # 80 FV at Mutated Child #1 at Generation # 14 : 31.75650189785454 FV at Mutated Child #2 at Generation # 14 : 6.274314465346162 --> Generation: # 15 --> Family: # 1 FV at Mutated Child #1 at Generation # 15 : 2445.9290373051977 FV at Mutated Child #2 at Generation # 15 : 3.1316630448722305 --> Family: # 2 FV at Mutated Child #1 at Generation # 15 : 14.80615350166065 FV at Mutated Child #2 at Generation # 15 : 2393.346231305347 --> Family: # 3 FV at Mutated Child #1 at Generation # 15 : 13.631305803676542 FV at Mutated Child #2 at Generation # 15 : 0.775028867514508 --> Family: # 4 FV at Mutated Child #1 at Generation # 15 : 1.5032856978797913 FV at Mutated Child #2 at Generation # 15 : 42.666024109100825 --> Family: # 5 FV at Mutated Child #1 at Generation # 15 : 10.981146904774851

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FV at Mutated Child #2 at Generation # 15 : 13.283485476979111 --> Family: # 6 FV at Mutated Child #1 at Generation # 15 : 12.393704395251532 FV at Mutated Child #2 at Generation # 15 : 4.09073131171677 --> Family: # 7 FV at Mutated Child #1 at Generation # 15 : 662.056305258537 FV at Mutated Child #2 at Generation # 15 : 8.481736341093898 --> Family: # 8 FV at Mutated Child #1 at Generation # 15 : 38.865997850187426 FV at Mutated Child #2 at Generation # 15 : 0.5983894292352919 --> Family: # 9 FV at Mutated Child #1 at Generation # 15 : 2189.3967188198462 FV at Mutated Child #2 at Generation # 15 : 1804.13358186965 --> Family: # 10 FV at Mutated Child #1 at Generation # 15 : 7.108974369352996 FV at Mutated Child #2 at Generation # 15 : 2.2817442308066287 --> Family: # 11 FV at Mutated Child #1 at Generation # 15 : 10.486980350355893 FV at Mutated Child #2 at Generation # 15 : 3.8694371597363566 --> Family: # 12 FV at Mutated Child #1 at Generation # 15 : 42.19037551673456 FV at Mutated Child #2 at Generation # 15 : 593.411851471575 --> Family: # 13 FV at Mutated Child #1 at Generation # 15 : 13.90767243676249 FV at Mutated Child #2 at Generation # 15 : 3.3628305602394617 --> Family: # 14 FV at Mutated Child #1 at Generation # 15 : 7.901669750593471 FV at Mutated Child #2 at Generation # 15 : 1.7260821197086467 --> Family: # 15 FV at Mutated Child #1 at Generation # 15 : 116.53761945341247 FV at Mutated Child #2 at Generation # 15 : 13.724850787171452 --> Family: # 16 FV at Mutated Child #1 at Generation # 15 : 3981.8455523746297 FV at Mutated Child #2 at Generation # 15 : 4445.327765220618 --> Family: # 17 FV at Mutated Child #1 at Generation # 15 : 137.84177419100956 FV at Mutated Child #2 at Generation # 15 : 604.0423009986491 --> Family: # 18 FV at Mutated Child #1 at Generation # 15 : 144.65115642139608 FV at Mutated Child #2 at Generation # 15 : 497.66054200128247 --> Family: # 19 FV at Mutated Child #1 at Generation # 15 : 10.657139882319756 FV at Mutated Child #2 at Generation # 15 : 33.024719526761224 --> Family: # 20 FV at Mutated Child #1 at Generation # 15 : 149.57051651049332 FV at Mutated Child #2 at Generation # 15 : 0.8282594053973489

Ex_1_2_3 --> Family: # 21 FV at Mutated Child #1 at Generation # 15 : 541.4622675790492 FV at Mutated Child #2 at Generation # 15 : 134.07394026016453 --> Family: # 22 FV at Mutated Child #1 at Generation # 15 : 2370.4247198269327 FV at Mutated Child #2 at Generation # 15 : 2617.497532744817 --> Family: # 23 FV at Mutated Child #1 at Generation # 15 : 15.445941686909721 FV at Mutated Child #2 at Generation # 15 : 8.256623998090271 --> Family: # 24 FV at Mutated Child #1 at Generation # 15 : 18.988631343733577 FV at Mutated Child #2 at Generation # 15 : 9.774049667070898 --> Family: # 25 FV at Mutated Child #1 at Generation # 15 : 23.862552974989754 FV at Mutated Child #2 at Generation # 15 : 20.817850306345875 --> Family: # 26 FV at Mutated Child #1 at Generation # 15 : 167.12316789254666 FV at Mutated Child #2 at Generation # 15 : 44.18407995706782 --> Family: # 27 FV at Mutated Child #1 at Generation # 15 : 22.81882025440221 FV at Mutated Child #2 at Generation # 15 : 2.6165331479097858 --> Family: # 28 FV at Mutated Child #1 at Generation # 15 : 1.0954236998070739 FV at Mutated Child #2 at Generation # 15 : 22.81882025440221 --> Family: # 29 FV at Mutated Child #1 at Generation # 15 : 37.495144088527994 FV at Mutated Child #2 at Generation # 15 : 2435.354839887472 --> Family: # 30 FV at Mutated Child #1 at Generation # 15 : 4.506236403370831 FV at Mutated Child #2 at Generation # 15 : 55.45732595932318 --> Family: # 31 FV at Mutated Child #1 at Generation # 15 : 48.18342017941809 FV at Mutated Child #2 at Generation # 15 : 37.37654477156704 --> Family: # 32 FV at Mutated Child #1 at Generation # 15 : 5.738815511200304 FV at Mutated Child #2 at Generation # 15 : 21.992097245024627 --> Family: # 33 FV at Mutated Child #1 at Generation # 15 : 1.4914257815346177 FV at Mutated Child #2 at Generation # 15 : 8.067380430840808 --> Family: # 34

FV at Mutated Child #1 at Generation # 15 : 39.61216057164095 FV at Mutated Child #2 at Generation # 15 : 34.22197210941622 --> Family: # 35

FV at Mutated Child #1 at Generation # 15 : 157.1748922104736 FV at Mutated Child #2 at Generation # 15 : 4.60155261800384 --> Family: # 36

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FV at Mutated Child #1 at Generation # 15 : 31.17263767867486
FV at Mutated Child #2 at Generation # 15 : 180.4106558058144
--> Family: # 37
FV at Mutated Child #1 at Generation # 15 : 30.411324529397856
FV at Mutated Child #2 at Generation # 15 : 142.75634839002964
--> Family: # 38
FV at Mutated Child #1 at Generation # 15 : 12.780054886342175
FV at Mutated Child #2 at Generation # 15 : 14.950175755051962
--> Family: # 39
FV at Mutated Child #1 at Generation # 15 : 130.10194126423738
FV at Mutated Child #2 at Generation # 15 : 36.4505653660858
--> Family: # 40
FV at Mutated Child #1 at Generation # 15 : 13.971469305684627
FV at Mutated Child #2 at Generation # 15 : 132.28286268156953
--> Family: # 41
FV at Mutated Child #1 at Generation # 15 : 16.663191565583652
FV at Mutated Child #2 at Generation # 15 : 41.735638004391426
--> Family: # 42
FV at Mutated Child #1 at Generation # 15 : 33.0650184208247
FV at Mutated Child #2 at Generation # 15 : 589.321344720864
--> Family: # 43
FV at Mutated Child #1 at Generation # 15 : 18.909990306145243
FV at Mutated Child #2 at Generation # 15 : 36.89087117159868
--> Family: # 44
FV at Mutated Child #1 at Generation # 15 : 16.10067802620015
FV at Mutated Child #2 at Generation # 15 : 7.463016029930497
--> Family: # 45
FV at Mutated Child #1 at Generation # 15 : 22.32463915255575
FV at Mutated Child #2 at Generation # 15 : 137.65670285514125
--> Family: # 46
FV at Mutated Child #1 at Generation # 15 : 55.257097881565734
FV at Mutated Child #2 at Generation # 15 : 3.959616145419016
--> Family: # 47
FV at Mutated Child #1 at Generation # 15 : 1.7287970959503607
FV at Mutated Child #2 at Generation # 15 : 38.51790555556428
--> Family: # 48
FV at Mutated Child #1 at Generation # 15 : 42.88887147693286
FV at Mutated Child #2 at Generation # 15 : 2.0489982703675387
--> Family: # 49
FV at Mutated Child #1 at Generation # 15 : 27.06674088752032
FV at Mutated Child #2 at Generation # 15 : 11.211754175852851
--> Family: # 50
FV at Mutated Child #1 at Generation # 15 : 22.431489689957203
FV at Mutated Child #2 at Generation # 15 : 143.924279465232
--> Family: # 51
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FV at Mutated Child #1 at Generation # 15 : 541.5570548562596 FV at Mutated Child #2 at Generation # 15 : 220.10448674627972 --> Family: # 52 FV at Mutated Child #1 at Generation # 15 : 107.15836815467907 FV at Mutated Child #2 at Generation # 15 : 120.67438960912244 --> Family: # 53 FV at Mutated Child #1 at Generation # 15 : 40.69257886896055 FV at Mutated Child #2 at Generation # 15 : 0.6893333109535634 --> Family: # 54 FV at Mutated Child #1 at Generation # 15 : 3.427536855947456 FV at Mutated Child #2 at Generation # 15 : 24.877911750368398 --> Family: # 55 FV at Mutated Child #1 at Generation # 15 : 7.786681941538886 FV at Mutated Child #2 at Generation # 15 : 34.08666938338872 --> Family: # 56 FV at Mutated Child #1 at Generation # 15 : 36.56047057284968 FV at Mutated Child #2 at Generation # 15 : 42.93403094518584 --> Family: # 57 FV at Mutated Child #1 at Generation # 15 : 11.599133467843556 FV at Mutated Child #2 at Generation # 15 : 47.23467630085489 --> Family: # 58 FV at Mutated Child #1 at Generation # 15 : 28.784304444136236 FV at Mutated Child #2 at Generation # 15 : 21.197153756950165 --> Family: # 59 FV at Mutated Child #1 at Generation # 15 : 38.44633387187728 FV at Mutated Child #2 at Generation # 15 : 6.260599697852173 --> Family: # 60 FV at Mutated Child #1 at Generation # 15 : 12.171509414131279 FV at Mutated Child #2 at Generation # 15 : 4.694264049908657 --> Family: # 61 FV at Mutated Child #1 at Generation # 15 : 1.9144142199781324 FV at Mutated Child #2 at Generation # 15 : 2.607585073408275 --> Family: # 62 FV at Mutated Child #1 at Generation # 15 : 14.505262946898927 FV at Mutated Child #2 at Generation # 15 : 18.48339330594661 --> Family: # 63 FV at Mutated Child #1 at Generation # 15 : 2.538729441009046 FV at Mutated Child #2 at Generation # 15 : 1.527497213831169 --> Family: # 64 FV at Mutated Child #1 at Generation # 15 : 186.0610523912018 FV at Mutated Child #2 at Generation # 15 : 123.77996686674689 --> Family: # 65 FV at Mutated Child #1 at Generation # 15 : 45374.82241752751

FV at Mutated Child #2 at Generation # 15 : 38654.920356497605 --> Family: # 66

FV at Mutated Child #1 at Generation # 15 : 10.04979882214883

FV at Mutated Child #2 at Generation # 15 : 15.104720986781103 --> Family: # 67 FV at Mutated Child #1 at Generation # 15 : 26.130302956148896 FV at Mutated Child #2 at Generation # 15 : 17.230404901366786 --> Family: # 68 FV at Mutated Child #1 at Generation # 15 : 3.3866864873876827 FV at Mutated Child #2 at Generation # 15 : 7.120518932046812 --> Family: # 69 FV at Mutated Child #1 at Generation # 15 : 21.645714952369786 FV at Mutated Child #2 at Generation # 15 : 109.02279470976013 --> Family: # 70 FV at Mutated Child #1 at Generation # 15 : 12.589620056600245 FV at Mutated Child #2 at Generation # 15 : 543.7674789205997 --> Family: # 71 FV at Mutated Child #1 at Generation # 15 : 1.3097046160578523 FV at Mutated Child #2 at Generation # 15 : 1.535333448642077 --> Family: # 72 FV at Mutated Child #1 at Generation # 15 : 2913.8824192970706 FV at Mutated Child #2 at Generation # 15 : 2487.6717833648536 --> Family: # 73 FV at Mutated Child #1 at Generation # 15 : 5.667437453519753 FV at Mutated Child #2 at Generation # 15 : 1.1426542222182035 --> Family: # 74 FV at Mutated Child #1 at Generation # 15 : 620.569882207781 FV at Mutated Child #2 at Generation # 15 : 1.5469830046294644 --> Family: # 75 FV at Mutated Child #1 at Generation # 15 : 20.709622388515275 FV at Mutated Child #2 at Generation # 15 : 42.19037551673456 --> Family: # 76 FV at Mutated Child #1 at Generation # 15 : 7.081634833054097 FV at Mutated Child #2 at Generation # 15 : 717.9711536885196 --> Family: # 77 FV at Mutated Child #1 at Generation # 15 : 22.392229975177614 FV at Mutated Child #2 at Generation # 15 : 6.208825207791945 --> Family: # 78 FV at Mutated Child #1 at Generation # 15 : 31.144030194036397 FV at Mutated Child #2 at Generation # 15 : 153.2601688589775 --> Family: # 79 FV at Mutated Child #1 at Generation # 15 : 96.40090251091084 FV at Mutated Child #2 at Generation # 15 : 569.3746247538639 --> Family: # 80 FV at Mutated Child #1 at Generation # 15 : 140.92795583346413 FV at Mutated Child #2 at Generation # 15 : 152.63705741627734 --> Generation: # 16 --> Family: # 1

FV at Mutated Child #1 at Generation # 16 : 1.7060780732400003

FV at Mutated Child #2 at Generation # 16 : 12.489116513969238 --> Family: # 2 FV at Mutated Child #1 at Generation # 16 : 591.3480052539712 FV at Mutated Child #2 at Generation # 16 : 0.7248633104603501 --> Family: # 3 FV at Mutated Child #1 at Generation # 16 : 2.8070954635504193 FV at Mutated Child #2 at Generation # 16 : 2.7125070598740164 --> Family: # 4 FV at Mutated Child #1 at Generation # 16 : 0.7606794923410389 FV at Mutated Child #2 at Generation # 16 : 4.450852241473423 --> Family: # 5 FV at Mutated Child #1 at Generation # 16 : 1.4076091303617764 FV at Mutated Child #2 at Generation # 16 : 120.43457401178931 --> Family: # 6 FV at Mutated Child #1 at Generation # 16: 0.4802197946072844 FV at Mutated Child #2 at Generation # 16 : 0.8096036964089863 --> Family: # 7 FV at Mutated Child #1 at Generation # 16 : 18.196068762385288 FV at Mutated Child #2 at Generation # 16 : 0.665732441703893 --> Family: # 8 FV at Mutated Child #1 at Generation # 16 : 2.6799009275597383 FV at Mutated Child #2 at Generation # 16 : 2.8517947401511856 --> Family: # 9 FV at Mutated Child #1 at Generation # 16 : 1.9938361205310218 FV at Mutated Child #2 at Generation # 16 : 21.55646833948658 --> Family: # 10 FV at Mutated Child #1 at Generation # 16 : 110.5689333940298 FV at Mutated Child #2 at Generation # 16 : 4.938992715630735 --> Family: # 11 FV at Mutated Child #1 at Generation # 16 : 479.01829837969154 FV at Mutated Child #2 at Generation # 16: 95.30959455883989 --> Family: # 12 FV at Mutated Child #1 at Generation # 16: 3769.861018871901 FV at Mutated Child #2 at Generation # 16 : 2199.688830057793 --> Family: # 13 FV at Mutated Child #1 at Generation # 16 : 29213.55572618237 FV at Mutated Child #2 at Generation # 16 : 51796.15059530451 --> Family: # 14 FV at Mutated Child #1 at Generation # 16 : 3.597573147051995 FV at Mutated Child #2 at Generation # 16 : 119.08589669153582 --> Family: # 15 FV at Mutated Child #1 at Generation # 16 : 5.005978557772244 FV at Mutated Child #2 at Generation # 16 : 392.658745521664 --> Family: # 16 FV at Mutated Child #1 at Generation # 16 : 4.497117307200469 FV at Mutated Child #2 at Generation # 16 : 68.29496623682282

Ex_1_2_3 --> Family: # 17 FV at Mutated Child #1 at Generation # 16: 0.7318608729948983 FV at Mutated Child #2 at Generation # 16 : 5.630700662908408 --> Family: # 18 FV at Mutated Child #1 at Generation # 16 : 2.5652792336062005 FV at Mutated Child #2 at Generation # 16 : 1.856504448477159 --> Family: # 19 FV at Mutated Child #1 at Generation # 16 : 19.215937139455203 FV at Mutated Child #2 at Generation # 16 : 594.3397985651055 --> Family: # 20 FV at Mutated Child #1 at Generation # 16 : 552.8895510462348 FV at Mutated Child #2 at Generation # 16 : 3.2890487619508835 --> Family: # 21 FV at Mutated Child #1 at Generation # 16 : 2.9205405024352786 FV at Mutated Child #2 at Generation # 16 : 1.7558901990127143 --> Family: # 22 FV at Mutated Child #1 at Generation # 16: 1.930143409871987 FV at Mutated Child #2 at Generation # 16 : 7.641463647439066 --> Family: # 23 FV at Mutated Child #1 at Generation # 16 : 69.03510694358395 FV at Mutated Child #2 at Generation # 16 : 3.809760927827185 --> Family: # 24 FV at Mutated Child #1 at Generation # 16 : 2.8186644296207066 FV at Mutated Child #2 at Generation # 16 : 596.2557331361596 --> Family: # 25 FV at Mutated Child #1 at Generation # 16 : 114.22395277451156 FV at Mutated Child #2 at Generation # 16 : 1.237644223478627 --> Family: # 26 FV at Mutated Child #1 at Generation # 16 : 106.84865979139627 FV at Mutated Child #2 at Generation # 16 : 1.068381254012788 --> Family: # 27 FV at Mutated Child #1 at Generation # 16 : 0.47420000949703195 FV at Mutated Child #2 at Generation # 16 : 0.6717630393917702 --> Family: # 28 FV at Mutated Child #1 at Generation # 16 : 0.40403350563578017 FV at Mutated Child #2 at Generation # 16 : 0.5877985936393321 --> Family: # 29 FV at Mutated Child #1 at Generation # 16 : 1.1637611684530986 FV at Mutated Child #2 at Generation # 16 : 0.512084258901654 --> Family: # 30 FV at Mutated Child #1 at Generation # 16 : 1.668065178703704 FV at Mutated Child #2 at Generation # 16 : 583.7483143408217 --> Family: # 31 FV at Mutated Child #1 at Generation # 16 : 3.4617906410969423

--> Family: # 32

FV at Mutated Child #2 at Generation # 16 : 3.4562428409448396

```
FV at Mutated Child #1 at Generation # 16 : 83.51599303055497
FV at Mutated Child #2 at Generation # 16 : 86.47249499500376
--> Family: # 33
FV at Mutated Child #1 at Generation # 16 : 36.29895651853996
FV at Mutated Child #2 at Generation # 16 : 119.03173270314433
--> Family: # 34
FV at Mutated Child #1 at Generation # 16: 0.9544089282330889
FV at Mutated Child #2 at Generation # 16 : 3.728456183425523
--> Family: # 35
FV at Mutated Child #1 at Generation # 16: 0.25242381846934203
FV at Mutated Child #2 at Generation # 16 : 10.358577664635066
--> Family: # 36
FV at Mutated Child #1 at Generation # 16 : 115.03799701378988
FV at Mutated Child #2 at Generation # 16 : 2.5310700446216643
--> Family: # 37
FV at Mutated Child #1 at Generation # 16 : 1.4375635469514658
FV at Mutated Child #2 at Generation # 16: 0.45902278912671485
--> Family: # 38
FV at Mutated Child #1 at Generation # 16: 0.5769298629293161
FV at Mutated Child #2 at Generation # 16 : 119.97375188060528
--> Family: # 39
FV at Mutated Child #1 at Generation # 16: 0.3885929994108942
FV at Mutated Child #2 at Generation # 16 : 0.6545345914390603
--> Family: # 40
FV at Mutated Child #1 at Generation # 16 : 72.76183202919248
FV at Mutated Child #2 at Generation # 16 : 72.75027373833663
--> Family: # 41
FV at Mutated Child #1 at Generation # 16 : 0.6759935593391858
FV at Mutated Child #2 at Generation # 16 : 0.6835897545392611
--> Family: # 42
FV at Mutated Child #1 at Generation # 16 : 1.8087403272953275
FV at Mutated Child #2 at Generation # 16 : 0.566023839486218
--> Family: # 43
FV at Mutated Child #1 at Generation # 16 : 21.287158010414903
FV at Mutated Child #2 at Generation # 16: 0.6209960739553668
--> Family: # 44
FV at Mutated Child #1 at Generation # 16 : 34.51144398025175
FV at Mutated Child #2 at Generation # 16 : 8.048426255700031
--> Family: # 45
FV at Mutated Child #1 at Generation # 16 : 480.4901614891161
FV at Mutated Child #2 at Generation # 16 : 4.8565126447509135
--> Family: # 46
FV at Mutated Child #1 at Generation # 16 : 1.035950539824413
FV at Mutated Child #2 at Generation # 16 : 27.013024015572025
--> Family: # 47
```

FV at Mutated Child #1 at Generation # 16 : 7.6235642705401645 FV at Mutated Child #2 at Generation # 16 : 1.0319256282321163 --> Family: # 48 FV at Mutated Child #1 at Generation # 16 : 6.170679360586281 FV at Mutated Child #2 at Generation # 16: 0.3192281606087173 --> Family: # 49 FV at Mutated Child #1 at Generation # 16 : 159.4050977104079 FV at Mutated Child #2 at Generation # 16 : 38.804301616730044 --> Family: # 50 FV at Mutated Child #1 at Generation # 16: 0.7937807074329333 FV at Mutated Child #2 at Generation # 16 : 2059.9020334137044 --> Family: # 51 FV at Mutated Child #1 at Generation # 16 : 0.3957557442405989 FV at Mutated Child #2 at Generation # 16 : 1.9355048769951022 --> Family: # 52 FV at Mutated Child #1 at Generation # 16 : 50.82747076538336 FV at Mutated Child #2 at Generation # 16 : 2.1400244475988197 --> Family: # 53 FV at Mutated Child #1 at Generation # 16 : 127.52774675925728 FV at Mutated Child #2 at Generation # 16 : 19.224453832996527 --> Family: # 54 FV at Mutated Child #1 at Generation # 16: 0.8618842407882674 FV at Mutated Child #2 at Generation # 16 : 4.937130625695286 --> Family: # 55 FV at Mutated Child #1 at Generation # 16 : 2.4888021914706475 FV at Mutated Child #2 at Generation # 16 : 41.33375344336206 --> Family: # 56 FV at Mutated Child #1 at Generation # 16 : 0.49516261396914263 FV at Mutated Child #2 at Generation # 16 : 438.21342192055266 --> Family: # 57 FV at Mutated Child #1 at Generation # 16 : 1.29634187705726 FV at Mutated Child #2 at Generation # 16 : 37.77856727818515 --> Family: # 58 FV at Mutated Child #1 at Generation # 16 : 1.366831218984935 FV at Mutated Child #2 at Generation # 16 : 0.8543496729277785 --> Family: # 59 FV at Mutated Child #1 at Generation # 16 : 146.45372112537743 FV at Mutated Child #2 at Generation # 16 : 146.06144230123564 --> Family: # 60 FV at Mutated Child #1 at Generation # 16 : 35.278741776921954 FV at Mutated Child #2 at Generation # 16 : 1.514226442073212 --> Family: # 61 FV at Mutated Child #1 at Generation # 16 : 6.504576153115674 FV at Mutated Child #2 at Generation # 16 : 5.3049288384841455

--> Family: # 62

FV at Mutated Child #2 at Generation # 16 : 135.84185837623238 --> Family: # 63 FV at Mutated Child #1 at Generation # 16 : 2.4235861419304854 FV at Mutated Child #2 at Generation # 16 : 6.657183196507141 --> Family: # 64 FV at Mutated Child #1 at Generation # 16 : 4.117137546015226 FV at Mutated Child #2 at Generation # 16 : 363.95205626793455 --> Family: # 65 FV at Mutated Child #1 at Generation # 16 : 6.812130119552892 FV at Mutated Child #2 at Generation # 16 : 8.599177898824637 --> Family: # 66 FV at Mutated Child #1 at Generation # 16 : 9.637532460741582 FV at Mutated Child #2 at Generation # 16: 0.42615815572037474 --> Family: # 67 FV at Mutated Child #1 at Generation # 16 : 3.4658798712779357 FV at Mutated Child #2 at Generation # 16 : 6.250106280969499 --> Family: # 68 FV at Mutated Child #1 at Generation # 16 : 5.342426481498741 FV at Mutated Child #2 at Generation # 16 : 407.66006403258217 --> Family: # 69 FV at Mutated Child #1 at Generation # 16 : 6.682186972303453 FV at Mutated Child #2 at Generation # 16 : 7.688989298700841 --> Family: # 70 FV at Mutated Child #1 at Generation # 16: 452.82819493747866 FV at Mutated Child #2 at Generation # 16 : 111.56768264587015 --> Family: # 71 FV at Mutated Child #1 at Generation # 16 : 25.88200971866466 FV at Mutated Child #2 at Generation # 16 : 9.644112490560463 --> Family: # 72 FV at Mutated Child #1 at Generation # 16 : 1.7060780732400003 FV at Mutated Child #2 at Generation # 16 : 2.7971005415274397 --> Family: # 73 FV at Mutated Child #1 at Generation # 16 : 1.8924190926054762 FV at Mutated Child #2 at Generation # 16 : 25.414133646948052 --> Family: # 74 FV at Mutated Child #1 at Generation # 16: 0.7716388489453615 FV at Mutated Child #2 at Generation # 16 : 1.1475177615418513 --> Family: # 75 FV at Mutated Child #1 at Generation # 16 : 0.4713301419833318 FV at Mutated Child #2 at Generation # 16 : 460.6930926381569 --> Family: # 76 FV at Mutated Child #1 at Generation # 16 : 4.360909805010366 FV at Mutated Child #2 at Generation # 16 : 13.179991412157436 --> Family: # 77 FV at Mutated Child #1 at Generation # 16 : 3.5199990747824836 FV at Mutated Child #2 at Generation # 16 : 12.275801757805226

--> Family: # 78 FV at Mutated Child #1 at Generation # 16 : 31.374646016347747 FV at Mutated Child #2 at Generation # 16: 0.6986509181576395 --> Family: # 79 FV at Mutated Child #1 at Generation # 16 : 31.933829725512084 FV at Mutated Child #2 at Generation # 16 : 1.8511094485841122 --> Family: # 80 FV at Mutated Child #1 at Generation # 16 : 2.143216647837206 FV at Mutated Child #2 at Generation # 16 : 5.349201221900735 --> Generation: # 17 --> Family: # 1 FV at Mutated Child #1 at Generation # 17 : 1.3815318277000002 FV at Mutated Child #2 at Generation # 17 : 31.306985733185744 --> Family: # 2 FV at Mutated Child #1 at Generation # 17 : 18.789017129697513 FV at Mutated Child #2 at Generation # 17 : 23.064198522746313 --> Family: # 3 FV at Mutated Child #1 at Generation # 17 : 1.728306997803492 FV at Mutated Child #2 at Generation # 17 : 24.836487302981105 --> Family: # 4 FV at Mutated Child #1 at Generation # 17 : 1934.9648679512327 FV at Mutated Child #2 at Generation # 17 : 6418.43566566729 --> Family: # 5 FV at Mutated Child #1 at Generation # 17 : 3.403543307923137 FV at Mutated Child #2 at Generation # 17 : 2532.5451341138373 --> Family: # 6 FV at Mutated Child #1 at Generation # 17 : 1.284815703242083 FV at Mutated Child #2 at Generation # 17 : 1.2199425634763137 --> Family: # 7 FV at Mutated Child #1 at Generation # 17 : 33.52310701912831 FV at Mutated Child #2 at Generation # 17 : 101.16087801602995 --> Family: # 8 FV at Mutated Child #1 at Generation # 17 : 55.792473649912424 FV at Mutated Child #2 at Generation # 17 : 11.105831109487829 --> Family: # 9 FV at Mutated Child #1 at Generation # 17 : 9.183449384733887 FV at Mutated Child #2 at Generation # 17 : 23.94393175459354 --> Family: # 10 FV at Mutated Child #1 at Generation # 17 : 36.14845125822733 FV at Mutated Child #2 at Generation # 17 : 22.303701527947663 --> Family: # 11 FV at Mutated Child #1 at Generation # 17 : 2365.3554202244013 FV at Mutated Child #2 at Generation # 17 : 1954.08126642379 --> Family: # 12 FV at Mutated Child #1 at Generation # 17 : 181.17221903427912

FV at Mutated Child #2 at Generation # 17 : 655.3122305169089

--> Family: # 13

FV at Mutated Child #1 at Generation # 17 : 15.579104879147053 FV at Mutated Child #2 at Generation # 17 : 62.06034930181705 --> Family: # 14

FV at Mutated Child #1 at Generation # 17 : 1.2495562418233486 FV at Mutated Child #2 at Generation # 17 : 1.6024029377872981 --> Family: # 15

FV at Mutated Child #1 at Generation # 17 : 37.533459562348966 FV at Mutated Child #2 at Generation # 17 : 15.853799277609415 --> Family: # 16

FV at Mutated Child #1 at Generation # 17 : 157.5233563384594 FV at Mutated Child #2 at Generation # 17 : 8.466149975973867 --> Family: # 17

FV at Mutated Child #1 at Generation # 17 : 258.7203471276571 FV at Mutated Child #2 at Generation # 17 : 28.784304444136236 --> Family: # 18

FV at Mutated Child #1 at Generation # 17 : 35.343084783806404 FV at Mutated Child #2 at Generation # 17 : 4.068923367043684 --> Family: # 19

FV at Mutated Child #1 at Generation # 17 : 9.674819507109863 FV at Mutated Child #2 at Generation # 17 : 13.421531014414608 --> Family: # 20

FV at Mutated Child #1 at Generation # 17 : 128.84492196567015 FV at Mutated Child #2 at Generation # 17 : 35.499670902503006 --> Family: # 21

FV at Mutated Child #1 at Generation # 17 : 15.355265212527653 FV at Mutated Child #2 at Generation # 17 : 109.65990371613444 --> Family: # 22

FV at Mutated Child #1 at Generation # 17 : 10.04979882214883 FV at Mutated Child #2 at Generation # 17 : 113.4885463899828 --> Family: # 23

FV at Mutated Child #1 at Generation # 17 : 678.3015176518531 FV at Mutated Child #2 at Generation # 17 : 531.8391587800375 --> Family: # 24

FV at Mutated Child #1 at Generation # 17 : 48.8456843224268 FV at Mutated Child #2 at Generation # 17 : 55.63886687627479 --> Family: # 25

FV at Mutated Child #1 at Generation # 17 : 127.0040768329056 FV at Mutated Child #2 at Generation # 17 : 36.055602650510785 --> Family: # 26

FV at Mutated Child #1 at Generation # 17 : 10.04979882214883 FV at Mutated Child #2 at Generation # 17 : 11.345620988659904 --> Family: # 27

FV at Mutated Child #1 at Generation # 17 : 706.6788445861569 FV at Mutated Child #2 at Generation # 17 : 164.46149374173766 --> Family: # 28

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FV at Mutated Child #1 at Generation # 17 : 7.0868455250712605
FV at Mutated Child #2 at Generation # 17 : 9.552973314731306
--> Family: # 29
FV at Mutated Child #1 at Generation # 17 : 25.94681300574225
FV at Mutated Child #2 at Generation # 17 : 11.060565985571094
--> Family: # 30
FV at Mutated Child #1 at Generation # 17 : 11.644338163366923
FV at Mutated Child #2 at Generation # 17 : 20.071498066647948
--> Family: # 31
FV at Mutated Child #1 at Generation # 17 : 155.21951081575185
FV at Mutated Child #2 at Generation # 17 : 135.28054290761034
--> Family: # 32
FV at Mutated Child #1 at Generation # 17 : 56.15696997497767
FV at Mutated Child #2 at Generation # 17 : 12.741742638538138
--> Family: # 33
FV at Mutated Child #1 at Generation # 17 : 169.93112215231685
FV at Mutated Child #2 at Generation # 17 : 7.0868455250712605
--> Family: # 34
FV at Mutated Child #1 at Generation # 17 : 56.22077374919427
FV at Mutated Child #2 at Generation # 17 : 144.17544162282266
--> Family: # 35
FV at Mutated Child #1 at Generation # 17 : 615.6978978982131
FV at Mutated Child #2 at Generation # 17 : 33.088213440485
--> Family: # 36
FV at Mutated Child #1 at Generation # 17 : 18.691631647235788
FV at Mutated Child #2 at Generation # 17 : 137.11905458988872
--> Family: # 37
FV at Mutated Child #1 at Generation # 17 : 30.630495517985224
FV at Mutated Child #2 at Generation # 17 : 75.34368985048545
--> Family: # 38
FV at Mutated Child #1 at Generation # 17 : 2.6165331479097858
FV at Mutated Child #2 at Generation # 17 : 1.183622495366114
--> Family: # 39
FV at Mutated Child #1 at Generation # 17 : 34.92776643386583
FV at Mutated Child #2 at Generation # 17 : 63.13160664047413
--> Family: # 40
FV at Mutated Child #1 at Generation # 17 : 11.736069646254228
FV at Mutated Child #2 at Generation # 17 : 30.805758892003745
--> Family: # 41
FV at Mutated Child #1 at Generation # 17 : 672.0434805746823
FV at Mutated Child #2 at Generation # 17 : 8.877800235552897
--> Family: # 42
FV at Mutated Child #1 at Generation # 17 : 18.046597637996356
FV at Mutated Child #2 at Generation # 17 : 137.4043798608362
--> Family: # 43
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FV at Mutated Child #1 at Generation # 17 : 44.489211675959936 FV at Mutated Child #2 at Generation # 17 : 7.658998672050621 --> Family: # 44 FV at Mutated Child #1 at Generation # 17 : 3.280061191564571 FV at Mutated Child #2 at Generation # 17 : 8.192069067262565 --> Family: # 45 FV at Mutated Child #1 at Generation # 17 : 5.879943132301138 FV at Mutated Child #2 at Generation # 17 : 8.280990612527447 --> Family: # 46 FV at Mutated Child #1 at Generation # 17 : 26.352566287641967 FV at Mutated Child #2 at Generation # 17 : 22.587111484390526 --> Family: # 47 FV at Mutated Child #1 at Generation # 17 : 20.008802296938605 FV at Mutated Child #2 at Generation # 17 : 5.020109572035476 --> Family: # 48 FV at Mutated Child #1 at Generation # 17 : 6.52010344676849 FV at Mutated Child #2 at Generation # 17 : 0.865904457043579 --> Family: # 49 FV at Mutated Child #1 at Generation # 17 : 170.7206670683475 FV at Mutated Child #2 at Generation # 17 : 6.493409359562371 --> Family: # 50 FV at Mutated Child #1 at Generation # 17 : 12.503036821322038 FV at Mutated Child #2 at Generation # 17 : 5.869359880814715 --> Family: # 51 FV at Mutated Child #1 at Generation # 17 : 32.534245368687664 FV at Mutated Child #2 at Generation # 17 : 1.3815318277000002 --> Family: # 52 FV at Mutated Child #1 at Generation # 17 : 135.51727177161789 FV at Mutated Child #2 at Generation # 17 : 18.983550436077593 --> Family: # 53 FV at Mutated Child #1 at Generation # 17 : 13.286428565488993 FV at Mutated Child #2 at Generation # 17 : 6.684862150365822 --> Family: # 54 FV at Mutated Child #1 at Generation # 17 : 70.43686371636332 FV at Mutated Child #2 at Generation # 17 : 5.70790813252649 --> Family: # 55 FV at Mutated Child #1 at Generation # 17 : 17.957921851369214 FV at Mutated Child #2 at Generation # 17 : 44.458746947713095 --> Family: # 56 FV at Mutated Child #1 at Generation # 17 : 30.912591219579085 FV at Mutated Child #2 at Generation # 17 : 35.83017949179495 --> Family: # 57 FV at Mutated Child #1 at Generation # 17 : 571.1930645714021

FV at Mutated Child #2 at Generation # 17 : 228.5219057659757 --> Family: # 58

FV at Mutated Child #1 at Generation # 17 : 4.083246982772718

FV at Mutated Child #2 at Generation # 17 : 1.7415134919319208 --> Family: # 59 FV at Mutated Child #1 at Generation # 17 : 51.25271123904247 FV at Mutated Child #2 at Generation # 17 : 14.079864900588657 --> Family: # 60 FV at Mutated Child #1 at Generation # 17 : 508.83341945709657 FV at Mutated Child #2 at Generation # 17 : 66.6129587959637 --> Family: # 61 FV at Mutated Child #1 at Generation # 17 : 16.086402798105226 FV at Mutated Child #2 at Generation # 17 : 8.80858581162028 --> Family: # 62 FV at Mutated Child #1 at Generation # 17: 43.3520744605047 FV at Mutated Child #2 at Generation # 17 : 169.13173919714453 --> Family: # 63 FV at Mutated Child #1 at Generation # 17 : 2322.219442556317 FV at Mutated Child #2 at Generation # 17 : 1.0100286458329306 --> Family: # 64 FV at Mutated Child #1 at Generation # 17 : 2470.61273515129 FV at Mutated Child #2 at Generation # 17 : 15.570700995207023 --> Family: # 65 FV at Mutated Child #1 at Generation # 17 : 47.09764390819793 FV at Mutated Child #2 at Generation # 17 : 14.35692160954514 --> Family: # 66 FV at Mutated Child #1 at Generation # 17 : 88.22166267647204 FV at Mutated Child #2 at Generation # 17 : 159.8122240389666 --> Family: # 67 FV at Mutated Child #1 at Generation # 17 : 11.762554926607015 FV at Mutated Child #2 at Generation # 17 : 3.690704698794346 --> Family: # 68 FV at Mutated Child #1 at Generation # 17 : 2.6228031421729643 FV at Mutated Child #2 at Generation # 17 : 8.846016249491646 --> Family: # 69 FV at Mutated Child #1 at Generation # 17 : 9.985043589755605 FV at Mutated Child #2 at Generation # 17 : 167.71163290484003 --> Family: # 70 FV at Mutated Child #1 at Generation # 17 : 1.8247641454016827 FV at Mutated Child #2 at Generation # 17 : 12.566896871551712 --> Family: # 71 FV at Mutated Child #1 at Generation # 17 : 8.569068340778783 FV at Mutated Child #2 at Generation # 17 : 35.49548238048977 --> Family: # 72 FV at Mutated Child #1 at Generation # 17 : 14.072011667094698 FV at Mutated Child #2 at Generation # 17 : 20.01299199190166 --> Family: # 73 FV at Mutated Child #1 at Generation # 17 : 10.392804992904844

FV at Mutated Child #2 at Generation # 17 : 56.882384094390545

--> Family: # 74 FV at Mutated Child #1 at Generation # 17 : 2007.5633900243793 FV at Mutated Child #2 at Generation # 17 : 2193.8297074589323 --> Family: # 75 FV at Mutated Child #1 at Generation # 17 : 427.1980431775632 FV at Mutated Child #2 at Generation # 17 : 13.769003424463989 --> Family: # 76 FV at Mutated Child #1 at Generation # 17 : 41.45473972109619 FV at Mutated Child #2 at Generation # 17 : 2.0799266039011766 --> Family: # 77 FV at Mutated Child #1 at Generation # 17 : 2.0442802436334313 FV at Mutated Child #2 at Generation # 17 : 57.36250635339297 --> Family: # 78 FV at Mutated Child #1 at Generation # 17 : 13.004682280601216 FV at Mutated Child #2 at Generation # 17 : 46.024355550289336 --> Family: # 79 FV at Mutated Child #1 at Generation # 17 : 43.77195169075077 FV at Mutated Child #2 at Generation # 17 : 50.03399781668649 --> Family: # 80 FV at Mutated Child #1 at Generation # 17 : 5.4978985515552035 FV at Mutated Child #2 at Generation # 17 : 1.6193956268429481 --> Generation: # 18 --> Family: # 1 FV at Mutated Child #1 at Generation # 18: 0.6047196367231782 FV at Mutated Child #2 at Generation # 18 : 0.556554702571115 --> Family: # 2 FV at Mutated Child #1 at Generation # 18 : 3.418948287114259 FV at Mutated Child #2 at Generation # 18 : 79.12194283822953 --> Family: # 3 FV at Mutated Child #1 at Generation # 18: 0.5769298629293161 FV at Mutated Child #2 at Generation # 18: 4.474636852758159 --> Family: # 4 FV at Mutated Child #1 at Generation # 18: 19.083209023754907 FV at Mutated Child #2 at Generation # 18 : 3.7208270023579817 --> Family: # 5 FV at Mutated Child #1 at Generation # 18 : 36.19713027970142 FV at Mutated Child #2 at Generation # 18 : 13.555392325669553 --> Family: # 6 FV at Mutated Child #1 at Generation # 18 : 1.6114108761622679 FV at Mutated Child #2 at Generation # 18 : 0.785963883818964 --> Family: # 7 FV at Mutated Child #1 at Generation # 18 : 3.348792342641158 FV at Mutated Child #2 at Generation # 18 : 31.620303125242884 --> Family: # 8 FV at Mutated Child #1 at Generation # 18 : 12.781639023594439

FV at Mutated Child #2 at Generation # 18 : 4.586615446207339

--> Family: # 9

FV at Mutated Child #1 at Generation # 18 : 1.3131243053260322 FV at Mutated Child #2 at Generation # 18 : 0.6151430147575169

--> Family: # 10

FV at Mutated Child #1 at Generation # 18 : 29.874988689410184 FV at Mutated Child #2 at Generation # 18 : 3.797827297565196

--> Family: # 11

FV at Mutated Child #1 at Generation # 18 : 453.73396735128864 FV at Mutated Child #2 at Generation # 18 : 3.844245274846839 --> Family: # 12

FV at Mutated Child #1 at Generation # 18 : 4.919679834061522 FV at Mutated Child #2 at Generation # 18 : 35.76198645896219

--> Family: # 13

FV at Mutated Child #1 at Generation # 18 : 0.6124522599356519 FV at Mutated Child #2 at Generation # 18 : 5.628507662845975 --> Family: # 14

FV at Mutated Child #1 at Generation # 18 : 1.7439757076598774
FV at Mutated Child #2 at Generation # 18 : 7.07890699442418
--> Family: # 15

FV at Mutated Child #1 at Generation # 18 : 130.84080311656663 FV at Mutated Child #2 at Generation # 18 : 0.5614750209161394 --> Family: # 16

FV at Mutated Child #1 at Generation # 18 : 0.9236298972099234 FV at Mutated Child #2 at Generation # 18 : 17.716408645763956 --> Family: # 17

FV at Mutated Child #1 at Generation # 18 : 8.615652625825641 FV at Mutated Child #2 at Generation # 18 : 75.93325354392353

--> Family: # 18

FV at Mutated Child #1 at Generation # 18 : 90.5964668370431 FV at Mutated Child #2 at Generation # 18 : 1.7394707065491433 --> Family: # 19

FV at Mutated Child #1 at Generation # 18 : 36.671183296007236 FV at Mutated Child #2 at Generation # 18 : 0.345011188705176 --> Family: # 20

FV at Mutated Child #1 at Generation # 18 : 3.4459769929809743 FV at Mutated Child #2 at Generation # 18 : 1.714784987987655 --> Family: # 21

FV at Mutated Child #1 at Generation # 18 : 4.502766954102836 FV at Mutated Child #2 at Generation # 18 : 5.116400350782089 --> Family: # 22

FV at Mutated Child #1 at Generation # 18 : 458.5307295308649
FV at Mutated Child #2 at Generation # 18 : 3.2482756820907883
--> Family: # 23

FV at Mutated Child #1 at Generation # 18 : 0.6202417446186571 FV at Mutated Child #2 at Generation # 18 : 1.5736362240592614 --> Family: # 24

FV at Mutated Child #1 at Generation # 18 : 4.01320460410386 FV at Mutated Child #2 at Generation # 18 : 544.2873441047287 --> Family: # 25 FV at Mutated Child #1 at Generation # 18 : 27.551294327200484 FV at Mutated Child #2 at Generation # 18 : 110.24032034900661 --> Family: # 26 FV at Mutated Child #1 at Generation # 18 : 5.246185607970464 FV at Mutated Child #2 at Generation # 18 : 34.9942285311457 --> Family: # 27 FV at Mutated Child #1 at Generation # 18 : 3.2890487619508835 FV at Mutated Child #2 at Generation # 18 : 587.8183306817573 --> Family: # 28 FV at Mutated Child #1 at Generation # 18 : 3.9736210999065733 FV at Mutated Child #2 at Generation # 18 : 0.9030574708329944 --> Family: # 29 FV at Mutated Child #1 at Generation # 18 : 1.948165385500991 FV at Mutated Child #2 at Generation # 18: 18.288381615137574 --> Family: # 30 FV at Mutated Child #1 at Generation # 18 : 3.497669292069169 FV at Mutated Child #2 at Generation # 18 : 29.83316171786513 --> Family: # 31 FV at Mutated Child #1 at Generation # 18 : 31.239536416851898 FV at Mutated Child #2 at Generation # 18 : 87.62293442380496 --> Family: # 32 FV at Mutated Child #1 at Generation # 18: 28.14590301358153 FV at Mutated Child #2 at Generation # 18 : 2.7332319887043686 --> Family: # 33 FV at Mutated Child #1 at Generation # 18 : 1.9579980865174627 FV at Mutated Child #2 at Generation # 18 : 3.148414775380198 --> Family: # 34 FV at Mutated Child #1 at Generation # 18 : 2323.9854405498945 FV at Mutated Child #2 at Generation # 18 : 0.6390334785661259 --> Family: # 35 FV at Mutated Child #1 at Generation # 18 : 34.53764634308405 FV at Mutated Child #2 at Generation # 18 : 75.89057126934168 --> Family: # 36 FV at Mutated Child #1 at Generation # 18 : 1.7558901990127143 FV at Mutated Child #2 at Generation # 18 : 11.138798607674198 --> Family: # 37 FV at Mutated Child #1 at Generation # 18 : 0.5085046159067759 FV at Mutated Child #2 at Generation # 18 : 4.607485392597018 --> Family: # 38 FV at Mutated Child #1 at Generation # 18 : 2.133049076650505 FV at Mutated Child #2 at Generation # 18 : 30.002837890808678 --> Family: # 39

FV at Mutated Child #1 at Generation # 18 : 0.7464244785932439 FV at Mutated Child #2 at Generation # 18 : 135.20194441902228 --> Family: # 40 FV at Mutated Child #1 at Generation # 18 : 79.80040641565573 FV at Mutated Child #2 at Generation # 18 : 124.46262134996786 --> Family: # 41 FV at Mutated Child #1 at Generation # 18 : 19.191424719655714 FV at Mutated Child #2 at Generation # 18: 0.7949784506704441 --> Family: # 42 FV at Mutated Child #1 at Generation # 18 : 4.947312718994943 FV at Mutated Child #2 at Generation # 18 : 492.6830874355726 --> Family: # 43 FV at Mutated Child #1 at Generation # 18: 0.6994228325409205 FV at Mutated Child #2 at Generation # 18 : 28.8906973612149 --> Family: # 44 FV at Mutated Child #1 at Generation # 18 : 0.7662979703387909 FV at Mutated Child #2 at Generation # 18 : 555.7230729270934 --> Family: # 45 FV at Mutated Child #1 at Generation # 18 : 128.07797387800778 FV at Mutated Child #2 at Generation # 18 : 1.765324097604627 --> Family: # 46 FV at Mutated Child #1 at Generation # 18 : 144.7379251066701 FV at Mutated Child #2 at Generation # 18 : 26.069486509099345 --> Family: # 47 FV at Mutated Child #1 at Generation # 18: 0.3619730355211446 FV at Mutated Child #2 at Generation # 18 : 79.22121190063302 --> Family: # 48 FV at Mutated Child #1 at Generation # 18: 0.8863103126188919 FV at Mutated Child #2 at Generation # 18 : 74.98589109338516 --> Family: # 49 FV at Mutated Child #1 at Generation # 18: 981.7430563055451 FV at Mutated Child #2 at Generation # 18 : 671.3797156119858 --> Family: # 50 FV at Mutated Child #1 at Generation # 18 : 504.06219998801726 FV at Mutated Child #2 at Generation # 18 : 3.625964856715768 --> Family: # 51 FV at Mutated Child #1 at Generation # 18 : 2.9458480932601243 FV at Mutated Child #2 at Generation # 18 : 0.5094020670365494 --> Family: # 52 FV at Mutated Child #1 at Generation # 18 : 68.91281016310487 FV at Mutated Child #2 at Generation # 18 : 2.682037674113595 --> Family: # 53

FV at Mutated Child #2 at Generation # 18 : 0.7095553717530576 --> Family: # 54

FV at Mutated Child #1 at Generation # 18 : 2.957588564687122

FV at Mutated Child #1 at Generation # 18 : 30.14151722544616

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FV at Mutated Child #2 at Generation # 18 : 1.151419619540739 --> Family: # 55 FV at Mutated Child #1 at Generation # 18 : 86.5565192782609 FV at Mutated Child #2 at Generation # 18 : 62.55405137268277 --> Family: # 56 FV at Mutated Child #1 at Generation # 18 : 0.952401293402244 FV at Mutated Child #2 at Generation # 18 : 0.7726115717666477 --> Family: # 57 FV at Mutated Child #1 at Generation # 18 : 3.6129287142398483 FV at Mutated Child #2 at Generation # 18 : 452.03702636057807 --> Family: # 58 FV at Mutated Child #1 at Generation # 18 : 0.831948154281448 FV at Mutated Child #2 at Generation # 18 : 478.34989558035505 --> Family: # 59 FV at Mutated Child #1 at Generation # 18 : 28.0321059653983 FV at Mutated Child #2 at Generation # 18 : 5.315181174542119 --> Family: # 60 FV at Mutated Child #1 at Generation # 18 : 7.706571181928239 FV at Mutated Child #2 at Generation # 18 : 133.32139983838633 --> Family: # 61 FV at Mutated Child #1 at Generation # 18 : 70.68048938328783 FV at Mutated Child #2 at Generation # 18 : 444.4444766494014 --> Family: # 62 FV at Mutated Child #1 at Generation # 18: 0.3192281606087173 FV at Mutated Child #2 at Generation # 18 : 7.887280446887237 --> Family: # 63 FV at Mutated Child #1 at Generation # 18 : 84.50203495027742 FV at Mutated Child #2 at Generation # 18 : 0.5954314839979628 --> Family: # 64 FV at Mutated Child #1 at Generation # 18: 0.6680129940093367 FV at Mutated Child #2 at Generation # 18: 0.786812418801253 --> Family: # 65 FV at Mutated Child #1 at Generation # 18: 6.187531107507615 FV at Mutated Child #2 at Generation # 18: 0.9029438585229439 --> Family: # 66 FV at Mutated Child #1 at Generation # 18 : 5.476082755895609 FV at Mutated Child #2 at Generation # 18 : 1.712479251606685 --> Family: # 67 FV at Mutated Child #1 at Generation # 18 : 0.628088431195575 FV at Mutated Child #2 at Generation # 18 : 0.6882945754528348 --> Family: # 68 FV at Mutated Child #1 at Generation # 18 : 0.9030574708329944 FV at Mutated Child #2 at Generation # 18 : 1.2089754821789684 --> Family: # 69 FV at Mutated Child #1 at Generation # 18 : 1.0373405537676321 FV at Mutated Child #2 at Generation # 18 : 7.935886408373652

Ex_1_2_3 --> Family: # 70 FV at Mutated Child #1 at Generation # 18 : 4.047631334003947 FV at Mutated Child #2 at Generation # 18 : 23.41603746111088 --> Family: # 71 FV at Mutated Child #1 at Generation # 18 : 96.46494078232648 FV at Mutated Child #2 at Generation # 18 : 99.39125855101388 --> Family: # 72 FV at Mutated Child #1 at Generation # 18 : 4.6022120728209135 FV at Mutated Child #2 at Generation # 18 : 6.921262866047159 --> Family: # 73 FV at Mutated Child #1 at Generation # 18 : 130.15067132411298 FV at Mutated Child #2 at Generation # 18 : 0.6028969825893828 --> Family: # 74 FV at Mutated Child #1 at Generation # 18 : 0.6476840110342641 FV at Mutated Child #2 at Generation # 18 : 26.283612701794578 --> Family: # 75 FV at Mutated Child #1 at Generation # 18 : 1.7652360189587593 FV at Mutated Child #2 at Generation # 18 : 7.823658327271944 --> Family: # 76 FV at Mutated Child #1 at Generation # 18 : 5.383266090463853 FV at Mutated Child #2 at Generation # 18 : 569.9040446234712 --> Family: # 77 FV at Mutated Child #1 at Generation # 18 : 7.760776918857815 FV at Mutated Child #2 at Generation # 18 : 1.0966428886394957 --> Family: # 78 FV at Mutated Child #1 at Generation # 18: 0.9121401797082774 FV at Mutated Child #2 at Generation # 18 : 15.017855725822034 --> Family: # 79 FV at Mutated Child #1 at Generation # 18 : 0.9203059056531706 FV at Mutated Child #2 at Generation # 18 : 0.42296863665305384 --> Family: # 80 FV at Mutated Child #1 at Generation # 18 : 3.1398164831251423 FV at Mutated Child #2 at Generation # 18 : 106.22953717543096 --> Generation: # 19 --> Family: # 1 FV at Mutated Child #1 at Generation # 19 : 0.9229792526924503 FV at Mutated Child #2 at Generation # 19 : 185.42434265708414 --> Family: # 2 FV at Mutated Child #1 at Generation # 19 : 8.76525043638398 FV at Mutated Child #2 at Generation # 19 : 20.000381056277536 --> Family: # 3 FV at Mutated Child #1 at Generation # 19 : 38.43111009918366 FV at Mutated Child #2 at Generation # 19 : 7.223669037224899 --> Family: # 4

FV at Mutated Child #1 at Generation # 19 : 22.847907965832185 FV at Mutated Child #2 at Generation # 19 : 82.63321311009666

--> Family: # 5 --> Family: # 6

FV at Mutated Child #1 at Generation # 19 : 1.7707465741530486 FV at Mutated Child #2 at Generation # 19 : 1.5828994907416964

--> Family: # 17

--> Family: # 18

FV at Mutated Child #1 at Generation # 19 : 156.19860534623064 FV at Mutated Child #2 at Generation # 19 : 28.127798587488872 --> Family: # 7

FV at Mutated Child #1 at Generation # 19 : 647.6323752199964 FV at Mutated Child #2 at Generation # 19 : 0.7062380193377098 --> Family: # 8

FV at Mutated Child #1 at Generation # 19 : 22.846737138402087 FV at Mutated Child #2 at Generation # 19 : 52.30578736156813 --> Family: # 9

FV at Mutated Child #1 at Generation # 19 : 656.6810861335688 FV at Mutated Child #2 at Generation # 19 : 24.1788459544607 --> Family: # 10

FV at Mutated Child #1 at Generation # 19 : 5.29942668339448 FV at Mutated Child #2 at Generation # 19 : 82.41167062910519 --> Family: # 11

FV at Mutated Child #1 at Generation # 19 : 8.232703301612384 FV at Mutated Child #2 at Generation # 19 : 170.77422434343654 --> Family: # 12

FV at Mutated Child #1 at Generation # 19 : 156.19860534623064 FV at Mutated Child #2 at Generation # 19 : 43.89986273579805 --> Family: # 13

FV at Mutated Child #1 at Generation # 19 : 49.360807397293804 FV at Mutated Child #2 at Generation # 19 : 8.237387162258349 --> Family: # 14

FV at Mutated Child #1 at Generation # 19 : 12.752147205185052 FV at Mutated Child #2 at Generation # 19 : 41.503803377621644 --> Family: # 15

FV at Mutated Child #1 at Generation # 19 : 33.77453906354771 FV at Mutated Child #2 at Generation # 19 : 36.37881228012627 --> Family: # 16

FV at Mutated Child #1 at Generation # 19 : 64.12490866200457 FV at Mutated Child #2 at Generation # 19 : 10.626895545854497

FV at Mutated Child #1 at Generation # 19 : 13.903973108749454 FV at Mutated Child #2 at Generation # 19 : 49.42648898486554

FV at Mutated Child #1 at Generation # 19 : 19.686828334275358 FV at Mutated Child #2 at Generation # 19 : 13.004682280601216 --> Family: # 19

FV at Mutated Child #1 at Generation # 19 : 12.0998916108651 FV at Mutated Child #2 at Generation # 19 : 13.081577577274844 --> Family: # 20

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FV at Mutated Child #1 at Generation # 19 : 3.926098984479532
FV at Mutated Child #2 at Generation # 19 : 11.954044193780366
--> Family: # 21
FV at Mutated Child #1 at Generation # 19 : 6.791919893373437
FV at Mutated Child #2 at Generation # 19 : 39.8500190361045
--> Family: # 22
FV at Mutated Child #1 at Generation # 19 : 359.614547392361
FV at Mutated Child #2 at Generation # 19 : 439.60623712837366
--> Family: # 23
FV at Mutated Child #1 at Generation # 19 : 151.02810846794316
FV at Mutated Child #2 at Generation # 19 : 9.552973314731306
--> Family: # 24
FV at Mutated Child #1 at Generation # 19 : 4.234415535899293
FV at Mutated Child #2 at Generation # 19 : 8.788798740039567
--> Family: # 25
FV at Mutated Child #1 at Generation # 19 : 6.76727418601431
FV at Mutated Child #2 at Generation # 19 : 28.2414780035127
--> Family: # 26
FV at Mutated Child #1 at Generation # 19 : 37.25145281998583
FV at Mutated Child #2 at Generation # 19 : 50.5076053417921
--> Family: # 27
FV at Mutated Child #1 at Generation # 19 : 9.048945198333316
FV at Mutated Child #2 at Generation # 19 : 158.82309128864648
--> Family: # 28
FV at Mutated Child #1 at Generation # 19 : 4.965075597819786
FV at Mutated Child #2 at Generation # 19 : 19.59666205318782
--> Family: # 29
FV at Mutated Child #1 at Generation # 19 : 43.24550952200618
FV at Mutated Child #2 at Generation # 19 : 1.9875510214606211
--> Family: # 30
FV at Mutated Child #1 at Generation # 19 : 22.34080572337747
FV at Mutated Child #2 at Generation # 19 : 3.695942233404236
--> Family: # 31
FV at Mutated Child #1 at Generation # 19 : 36.22533767068032
FV at Mutated Child #2 at Generation # 19 : 55.73351171848863
--> Family: # 32
FV at Mutated Child #1 at Generation # 19 : 31.228599988925165
FV at Mutated Child #2 at Generation # 19 : 13.468485233068947
--> Family: # 33
FV at Mutated Child #1 at Generation # 19 : 13.933049825940799
FV at Mutated Child #2 at Generation # 19 : 378.1430829522267
--> Family: # 34
FV at Mutated Child #1 at Generation # 19 : 599.0044715136269
FV at Mutated Child #2 at Generation # 19 : 143.67015188795494
--> Family: # 35
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FV at Mutated Child #1 at Generation # 19 : 143.3006862716177 FV at Mutated Child #2 at Generation # 19 : 26.74910592071963 --> Family: # 36 FV at Mutated Child #1 at Generation # 19 : 9.900960049463679 FV at Mutated Child #2 at Generation # 19 : 159.13908890476276 --> Family: # 37 FV at Mutated Child #1 at Generation # 19 : 40.58717671343799 FV at Mutated Child #2 at Generation # 19 : 26.7557665102891 --> Family: # 38 FV at Mutated Child #1 at Generation # 19 : 54.25442195993849 FV at Mutated Child #2 at Generation # 19 : 13.774982618981564 --> Family: # 39 FV at Mutated Child #1 at Generation # 19 : 5.5363570049204265 FV at Mutated Child #2 at Generation # 19 : 45.248127193231426 --> Family: # 40 FV at Mutated Child #1 at Generation # 19 : 12.26679246968569 FV at Mutated Child #2 at Generation # 19 : 11.072066211005131 --> Family: # 41 FV at Mutated Child #1 at Generation # 19 : 113.84284356529233 FV at Mutated Child #2 at Generation # 19 : 2.6165331479097858 --> Family: # 42 FV at Mutated Child #1 at Generation # 19 : 148.27279525737873 FV at Mutated Child #2 at Generation # 19 : 18.50599155732649 --> Family: # 43 FV at Mutated Child #1 at Generation # 19 : 22.948825407900447 FV at Mutated Child #2 at Generation # 19 : 5.9502350905687535 --> Family: # 44 FV at Mutated Child #1 at Generation # 19 : 14.913391430447952 FV at Mutated Child #2 at Generation # 19 : 114.78006142153905 --> Family: # 45 FV at Mutated Child #1 at Generation # 19 : 695.0381669639264 FV at Mutated Child #2 at Generation # 19 : 2460.5060571424187 --> Family: # 46 FV at Mutated Child #1 at Generation # 19 : 130.55182297922556 FV at Mutated Child #2 at Generation # 19 : 190.81828551953342 --> Family: # 47 FV at Mutated Child #1 at Generation # 19 : 2.6136842118306185 FV at Mutated Child #2 at Generation # 19 : 3.521773254268323 --> Family: # 48 FV at Mutated Child #1 at Generation # 19 : 2.9043418867892754 FV at Mutated Child #2 at Generation # 19 : 23.294638227580585 --> Family: # 49 FV at Mutated Child #1 at Generation # 19 : 7.158275483468975

FV at Mutated Child #2 at Generation # 19 : 2.571906178122932 --> Family: # 50

FV at Mutated Child #1 at Generation # 19 : 11.892816335412004

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FV at Mutated Child #2 at Generation # 19 : 148.0531790701505 --> Family: # 51 FV at Mutated Child #1 at Generation # 19 : 2.040864304472622 FV at Mutated Child #2 at Generation # 19 : 6.493409359562371 --> Family: # 52 FV at Mutated Child #1 at Generation # 19 : 36.741890864405555 FV at Mutated Child #2 at Generation # 19 : 0.9024857409961289 --> Family: # 53 FV at Mutated Child #1 at Generation # 19 : 89.64402512647317 FV at Mutated Child #2 at Generation # 19 : 16.086402798105226 --> Family: # 54 FV at Mutated Child #1 at Generation # 19 : 9.729532480360783 FV at Mutated Child #2 at Generation # 19 : 50.22673015240064 --> Family: # 55 FV at Mutated Child #1 at Generation # 19 : 625.7171190777759 FV at Mutated Child #2 at Generation # 19 : 17.978143765532593 --> Family: # 56 FV at Mutated Child #1 at Generation # 19 : 46.81237402150403 FV at Mutated Child #2 at Generation # 19 : 200.30498916346042 --> Family: # 57 FV at Mutated Child #1 at Generation # 19 : 30.360243279844234 FV at Mutated Child #2 at Generation # 19 : 3.3421207817823086 --> Family: # 58 FV at Mutated Child #1 at Generation # 19 : 2.937476100051185 FV at Mutated Child #2 at Generation # 19 : 39.525727066353696 --> Family: # 59 FV at Mutated Child #1 at Generation # 19 : 7.41001087173496 FV at Mutated Child #2 at Generation # 19 : 626.8195057857848 --> Family: # 60 FV at Mutated Child #1 at Generation # 19 : 22.74388995084051 FV at Mutated Child #2 at Generation # 19 : 7.128246416620149 --> Family: # 61 FV at Mutated Child #1 at Generation # 19 : 127.6684327431056 FV at Mutated Child #2 at Generation # 19 : 38.24685882408632 --> Family: # 62 FV at Mutated Child #1 at Generation # 19 : 143.79304608151156 FV at Mutated Child #2 at Generation # 19 : 20.459624510710267 --> Family: # 63 FV at Mutated Child #1 at Generation # 19 : 6.695617212201126 FV at Mutated Child #2 at Generation # 19 : 2580.1855723403824 --> Family: # 64 FV at Mutated Child #1 at Generation # 19 : 920.0577359700548 FV at Mutated Child #2 at Generation # 19 : 267.5321067912212 --> Family: # 65 FV at Mutated Child #1 at Generation # 19 : 130.4747797084637 FV at Mutated Child #2 at Generation # 19 : 1119.9678470204285

--> Family: # 66

--> Family: # 68

FV at Mutated Child #1 at Generation # 19 : 11.181102041954805
FV at Mutated Child #2 at Generation # 19 : 12.287189207214322
--> Family: # 67

FV at Mutated Child #1 at Generation # 19 : 631.0793886496682
FV at Mutated Child #2 at Generation # 19 : 3.2453719200858764

FV at Mutated Child #1 at Generation # 19 : 698.2597284501062 FV at Mutated Child #2 at Generation # 19 : 2630.1033527253244 --> Family: # 69

FV at Mutated Child #1 at Generation # 19 : 33.024719526761224 FV at Mutated Child #2 at Generation # 19 : 14.99424338215151 --> Family: # 70

FV at Mutated Child #1 at Generation # 19 : 132.28977400269346 FV at Mutated Child #2 at Generation # 19 : 145.93857028455707 --> Family: # 71

FV at Mutated Child #1 at Generation # 19 : 0.775028867514508 FV at Mutated Child #2 at Generation # 19 : 12.364751247032377 --> Family: # 72

FV at Mutated Child #1 at Generation # 19 : 17.794228769464414
FV at Mutated Child #2 at Generation # 19 : 34.00397239658194
--> Family: # 73

FV at Mutated Child #1 at Generation # 19 : 2329.343232774619 FV at Mutated Child #2 at Generation # 19 : 4.161412157733503 --> Family: # 74

FV at Mutated Child #1 at Generation # 19 : 18.3934752538637 FV at Mutated Child #2 at Generation # 19 : 18.98083613767082 --> Family: # 75

FV at Mutated Child #1 at Generation # 19 : 39.582975580185675 FV at Mutated Child #2 at Generation # 19 : 46.2843960020786 --> Family: # 76

FV at Mutated Child #1 at Generation # 19 : 658.9254684414776 FV at Mutated Child #2 at Generation # 19 : 26.352566287641967 --> Family: # 77

FV at Mutated Child #1 at Generation # 19 : 34.267623778442655 FV at Mutated Child #2 at Generation # 19 : 18.51080073889749 --> Family: # 78

FV at Mutated Child #1 at Generation # 19 : 34.314687074801974
FV at Mutated Child #2 at Generation # 19 : 175.12420875213581
--> Family: # 79

FV at Mutated Child #1 at Generation # 19 : 11.38955019626948 FV at Mutated Child #2 at Generation # 19 : 5.501472289699986 --> Family: # 80

FV at Mutated Child #1 at Generation # 19 : 530.6656782414631 FV at Mutated Child #2 at Generation # 19 : 466.9769696954271 --> Generation: # 20

-- / deliei action. # 20

Ex_1_2_3 --> Family: # 1 FV at Mutated Child #1 at Generation # 20 : 2.426112535119799 FV at Mutated Child #2 at Generation # 20 : 154.6444117046028 --> Family: # 2 FV at Mutated Child #1 at Generation # 20 : 124.75924536489819 FV at Mutated Child #2 at Generation # 20 : 1.9783094159257824 --> Family: # 3 FV at Mutated Child #1 at Generation # 20 : 18.70332097943042 FV at Mutated Child #2 at Generation # 20 : 12.883233697553104 --> Family: # 4 FV at Mutated Child #1 at Generation # 20 : 0.7187185300838413 FV at Mutated Child #2 at Generation # 20 : 1.1268668547329082 --> Family: # 5 FV at Mutated Child #1 at Generation # 20 : 7.1581350749799295 FV at Mutated Child #2 at Generation # 20 : 137.4715129947213 --> Family: # 6 FV at Mutated Child #1 at Generation # 20 : 0.7411579125418893 FV at Mutated Child #2 at Generation # 20 : 29.03550762843218 --> Family: # 7 FV at Mutated Child #1 at Generation # 20 : 3.969546964266263 FV at Mutated Child #2 at Generation # 20 : 0.7202440200446862 --> Family: # 8 FV at Mutated Child #1 at Generation # 20 : 25.579603301008667 FV at Mutated Child #2 at Generation # 20 : 0.4536910935807233 --> Family: # 9 FV at Mutated Child #1 at Generation # 20 : 65.27553768951505 FV at Mutated Child #2 at Generation # 20 : 4.557791152445764 --> Family: # 10 FV at Mutated Child #1 at Generation # 20 : 1.4654803372293663 FV at Mutated Child #2 at Generation # 20 : 26.68953378524978 --> Family: # 11 FV at Mutated Child #1 at Generation # 20 : 1.666422003988276 FV at Mutated Child #2 at Generation # 20 : 14.367224259455554 --> Family: # 12 FV at Mutated Child #1 at Generation # 20 : 2.083327207598545 FV at Mutated Child #2 at Generation # 20 : 8.929065297193887 --> Family: # 13 FV at Mutated Child #1 at Generation # 20 : 2.2681469882381067 FV at Mutated Child #2 at Generation # 20 : 0.8578152325826991 --> Family: # 14 FV at Mutated Child #1 at Generation # 20 : 2.4994057953445434 FV at Mutated Child #2 at Generation # 20 : 5.050118534941482 --> Family: # 15 FV at Mutated Child #1 at Generation # 20 : 0.31508274362286315

localhost:8888/nbconvert/html/Desktop/Matheuristics/Ex 1 2 3.ipynb?download=false

--> Family: # 16

FV at Mutated Child #2 at Generation # 20 : 2.651198725872285

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FV at Mutated Child #1 at Generation # 20 : 0.5299842519757342
FV at Mutated Child #2 at Generation # 20 : 2.3664643060336408
--> Family: # 17
FV at Mutated Child #1 at Generation # 20 : 3.8504263027638985
FV at Mutated Child #2 at Generation # 20 : 4.36855739702219
--> Family: # 18
FV at Mutated Child #1 at Generation # 20 : 0.6050776737096388
FV at Mutated Child #2 at Generation # 20 : 428.25064842042883
--> Family: # 19
FV at Mutated Child #1 at Generation # 20 : 2328.8921823560127
FV at Mutated Child #2 at Generation # 20 : 3.04245924322214
--> Family: # 20
FV at Mutated Child #1 at Generation # 20 : 130.2917531700597
FV at Mutated Child #2 at Generation # 20 : 0.4995647632156631
--> Family: # 21
FV at Mutated Child #1 at Generation # 20 : 0.7355974014067547
FV at Mutated Child #2 at Generation # 20 : 0.5253950209840618
--> Family: # 22
FV at Mutated Child #1 at Generation # 20 : 15.684245391119918
FV at Mutated Child #2 at Generation # 20 : 54.07528607918433
--> Family: # 23
FV at Mutated Child #1 at Generation # 20 : 1.0373405537676321
FV at Mutated Child #2 at Generation # 20 : 10.890154165995952
--> Family: # 24
FV at Mutated Child #1 at Generation # 20 : 31.255082729103993
FV at Mutated Child #2 at Generation # 20 : 145.74550806383894
--> Family: # 25
FV at Mutated Child #1 at Generation # 20 : 10.537398168785492
FV at Mutated Child #2 at Generation # 20 : 122.95195163488559
--> Family: # 26
FV at Mutated Child #1 at Generation # 20 : 1.9144167763365187
FV at Mutated Child #2 at Generation # 20 : 14.551232441508937
--> Family: # 27
FV at Mutated Child #1 at Generation # 20 : 0.9030574708329944
FV at Mutated Child #2 at Generation # 20 : 23.689890416826128
--> Family: # 28
FV at Mutated Child #1 at Generation # 20 : 3.8121901539363607
FV at Mutated Child #2 at Generation # 20 : 25.854237454848807
--> Family: # 29
FV at Mutated Child #1 at Generation # 20 : 6.695687961885305
FV at Mutated Child #2 at Generation # 20 : 0.2300371150414227
--> Family: # 30
FV at Mutated Child #1 at Generation # 20 : 12.714796401529826
FV at Mutated Child #2 at Generation # 20 : 8.008618550973225
--> Family: # 31
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FV at Mutated Child #1 at Generation # 20 : 115.83273890930089 FV at Mutated Child #2 at Generation # 20 : 5.510870687612657 --> Family: # 32 FV at Mutated Child #1 at Generation # 20 : 3.903363145173323 FV at Mutated Child #2 at Generation # 20 : 5.454639683551357 --> Family: # 33 FV at Mutated Child #1 at Generation # 20 : 0.44877835910916875 FV at Mutated Child #2 at Generation # 20 : 75.26756902408601 --> Family: # 34 FV at Mutated Child #1 at Generation # 20 : 1.3905824177396662 FV at Mutated Child #2 at Generation # 20 : 1.838968493838767 --> Family: # 35 FV at Mutated Child #1 at Generation # 20 : 78.69585876918093 FV at Mutated Child #2 at Generation # 20 : 1.8588176279567847 --> Family: # 36 FV at Mutated Child #1 at Generation # 20 : 0.5695181417773997 FV at Mutated Child #2 at Generation # 20 : 77.90790867171145 --> Family: # 37 FV at Mutated Child #1 at Generation # 20 : 4.057649101153181 FV at Mutated Child #2 at Generation # 20 : 2.368274671763624 --> Family: # 38 FV at Mutated Child #1 at Generation # 20 : 6.739431201294442 FV at Mutated Child #2 at Generation # 20 : 22.46177199965807 --> Family: # 39 FV at Mutated Child #1 at Generation # 20 : 3.274922309199057 FV at Mutated Child #2 at Generation # 20 : 59.83732736632319 --> Family: # 40 FV at Mutated Child #1 at Generation # 20 : 1.835325103206991 FV at Mutated Child #2 at Generation # 20 : 2.4155236429405598 --> Family: # 41 FV at Mutated Child #1 at Generation # 20 : 1.1398521965369914 FV at Mutated Child #2 at Generation # 20 : 15.460560849634676 --> Family: # 42 FV at Mutated Child #1 at Generation # 20 : 13.168067104652502 FV at Mutated Child #2 at Generation # 20 : 25.190436890554505 --> Family: # 43 FV at Mutated Child #1 at Generation # 20 : 3.088164322618128 FV at Mutated Child #2 at Generation # 20 : 24.505725820296345 --> Family: # 44 FV at Mutated Child #1 at Generation # 20 : 1.0929710063812061 FV at Mutated Child #2 at Generation # 20 : 25.442061971793976 --> Family: # 45 FV at Mutated Child #1 at Generation # 20 : 2.672564273643974

FV at Mutated Child #2 at Generation # 20 : 1.0844439976481335 --> Family: # 46

FV at Mutated Child #1 at Generation # 20 : 0.27545284676672993

FV at Mutated Child #2 at Generation # 20 : 0.31623349524305233 --> Family: # 47 FV at Mutated Child #1 at Generation # 20 : 4.572307803523695 FV at Mutated Child #2 at Generation # 20 : 0.7073141856110651 --> Family: # 48 FV at Mutated Child #1 at Generation # 20 : 1.723997367528391 FV at Mutated Child #2 at Generation # 20 : 443.4412929757772 --> Family: # 49 FV at Mutated Child #1 at Generation # 20 : 497.2123218294063 FV at Mutated Child #2 at Generation # 20 : 0.7626701024540602 --> Family: # 50 FV at Mutated Child #1 at Generation # 20 : 2.4994057953445434 FV at Mutated Child #2 at Generation # 20 : 24.5860585883645 --> Family: # 51 FV at Mutated Child #1 at Generation # 20 : 1.690152961098673 FV at Mutated Child #2 at Generation # 20 : 98.12093541259405 --> Family: # 52 FV at Mutated Child #1 at Generation # 20 : 108.91443603820402 FV at Mutated Child #2 at Generation # 20 : 34.28843647706433 --> Family: # 53 FV at Mutated Child #1 at Generation # 20 : 0.7274342959634877 FV at Mutated Child #2 at Generation # 20 : 2.302589253705097 --> Family: # 54 FV at Mutated Child #1 at Generation # 20 : 25.34673661256211 FV at Mutated Child #2 at Generation # 20 : 0.8614597374910444 --> Family: # 55 FV at Mutated Child #1 at Generation # 20 : 410.7846096136879 FV at Mutated Child #2 at Generation # 20 : 8.59183469682523 --> Family: # 56 FV at Mutated Child #1 at Generation # 20 : 1.0669469520343604 FV at Mutated Child #2 at Generation # 20 : 12.769471587272339 --> Family: # 57 FV at Mutated Child #1 at Generation # 20 : 0.4511694867050259 FV at Mutated Child #2 at Generation # 20 : 40.972241524427595 --> Family: # 58 FV at Mutated Child #1 at Generation # 20 : 588.8311382764902 FV at Mutated Child #2 at Generation # 20 : 511.6421552500129 --> Family: # 59 FV at Mutated Child #1 at Generation # 20 : 2.3957836635649703 FV at Mutated Child #2 at Generation # 20 : 0.376575210481354 --> Family: # 60 FV at Mutated Child #1 at Generation # 20 : 16.64794078035611 FV at Mutated Child #2 at Generation # 20 : 0.8183472230900772 --> Family: # 61 FV at Mutated Child #1 at Generation # 20 : 501.2890247012384

FV at Mutated Child #2 at Generation # 20 : 1.3336412466183019

--> Family: # 62

FV at Mutated Child #1 at Generation # 20 : 10.821615941960223 FV at Mutated Child #2 at Generation # 20 : 12.303420821886899

--> Family: # 63

FV at Mutated Child #1 at Generation # 20 : 92.03466749193096 FV at Mutated Child #2 at Generation # 20 : 0.955669607038798

--> Family: # 64

FV at Mutated Child #1 at Generation # 20 : 8.344872816026971 FV at Mutated Child #2 at Generation # 20 : 0.5253950209840618

--> Family: # 65

FV at Mutated Child #1 at Generation # 20 : 78.93164739311338 FV at Mutated Child #2 at Generation # 20 : 3.50086321046317

--> Family: # 66

FV at Mutated Child #1 at Generation # 20 : 73.51756274274945
FV at Mutated Child #2 at Generation # 20 : 0.7663488550095707
--> Family: # 67

FV at Mutated Child #1 at Generation # 20 : 111.49862969630313 FV at Mutated Child #2 at Generation # 20 : 144.94643002687562 --> Family: # 68

FV at Mutated Child #1 at Generation # 20 : 3.3121716943587423 FV at Mutated Child #2 at Generation # 20 : 17.42544698503025 --> Family: # 69

FV at Mutated Child #1 at Generation # 20 : 38.49246086245839 FV at Mutated Child #2 at Generation # 20 : 2.093795121352465 --> Family: # 70

FV at Mutated Child #1 at Generation # 20 : 116.45444390395416 FV at Mutated Child #2 at Generation # 20 : 2.391479128389048 --> Family: # 71

FV at Mutated Child #1 at Generation # 20 : 25.668062502865286 FV at Mutated Child #2 at Generation # 20 : 443.34488055421247 --> Family: # 72

FV at Mutated Child #1 at Generation # 20 : 5.665786595107192 FV at Mutated Child #2 at Generation # 20 : 0.5274110968795303 --> Family: # 73

FV at Mutated Child #1 at Generation # 20 : 8.418967248376346 FV at Mutated Child #2 at Generation # 20 : 2.169865756165703 --> Family: # 74

FV at Mutated Child #1 at Generation # 20 : 0.7572636554730205 FV at Mutated Child #2 at Generation # 20 : 15.460560849634676 --> Family: # 75

FV at Mutated Child #1 at Generation # 20 : 20.910646570099296 FV at Mutated Child #2 at Generation # 20 : 20.37631492231697

--> Family: # 76

FV at Mutated Child #1 at Generation # 20 : 0.7824841574712891 FV at Mutated Child #2 at Generation # 20 : 122.62932955905377

--> Family: # 77

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FV at Mutated Child #1 at Generation # 20 : 15.35977613558527
FV at Mutated Child #2 at Generation # 20 : 4.59416437575443
--> Family: # 78
FV at Mutated Child #1 at Generation # 20 : 0.51855940142504
FV at Mutated Child #2 at Generation # 20 : 5.41205913162351
--> Family: # 79
FV at Mutated Child #1 at Generation # 20 : 4.46568515775074
FV at Mutated Child #2 at Generation # 20 : 484.6489245447137
--> Family: # 80
FV at Mutated Child #1 at Generation # 20 : 1.679138158789458
FV at Mutated Child #2 at Generation # 20 : 3.1126012102315888
--> Generation: # 21
--> Family: # 1
FV at Mutated Child #1 at Generation # 21 : 13.142218125820126
FV at Mutated Child #2 at Generation # 21 : 30.83091414188254
--> Family: # 2
FV at Mutated Child #1 at Generation # 21 : 11.372876140513457
FV at Mutated Child #2 at Generation # 21 : 28.510812287193705
--> Family: # 3
FV at Mutated Child #1 at Generation # 21 : 134.10570209544338
FV at Mutated Child #2 at Generation # 21 : 2.9423326766909486
--> Family: # 4
FV at Mutated Child #1 at Generation # 21 : 22.734228188411347
FV at Mutated Child #2 at Generation # 21 : 49.42648898486554
--> Family: # 5
FV at Mutated Child #1 at Generation # 21 : 33.33909866979599
FV at Mutated Child #2 at Generation # 21 : 26.691667855233934
--> Family: # 6
FV at Mutated Child #1 at Generation # 21 : 8.590269838434377
FV at Mutated Child #2 at Generation # 21 : 62.467718015637494
--> Family: # 7
FV at Mutated Child #1 at Generation # 21 : 580.799402124566
FV at Mutated Child #2 at Generation # 21 : 16.99521677999099
--> Family: # 8
FV at Mutated Child #1 at Generation # 21 : 0.6558092796183356
FV at Mutated Child #2 at Generation # 21 : 19.54281337679884
--> Family: # 9
FV at Mutated Child #1 at Generation # 21 : 10.919624018140023
FV at Mutated Child #2 at Generation # 21 : 19.970720458582424
--> Family: # 10
FV at Mutated Child #1 at Generation # 21 : 53.524381918519595
FV at Mutated Child #2 at Generation # 21 : 6.120043428390251
--> Family: # 11
FV at Mutated Child #1 at Generation # 21 : 14.6030173753122
FV at Mutated Child #2 at Generation # 21 : 614.5004033440944
--> Family: # 12
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FV at Mutated Child #1 at Generation # 21 : 8.857526679730524
FV at Mutated Child #2 at Generation # 21 : 12.431911220552772
--> Family: # 13
FV at Mutated Child #1 at Generation # 21 : 14.080328705485394
FV at Mutated Child #2 at Generation # 21 : 12.09297499609527
--> Family: # 14
FV at Mutated Child #1 at Generation # 21 : 11.506971388091825
FV at Mutated Child #2 at Generation # 21 : 4.7983906006313575
--> Family: # 15
FV at Mutated Child #1 at Generation # 21 : 2360.788162487475
FV at Mutated Child #2 at Generation # 21 : 62.06944022686103
--> Family: # 16
FV at Mutated Child #1 at Generation # 21 : 7.800237991087597
FV at Mutated Child #2 at Generation # 21 : 30.06921110547891
--> Family: # 17
FV at Mutated Child #1 at Generation # 21 : 162.80843186928183
FV at Mutated Child #2 at Generation # 21 : 8.579712565385051
--> Family: # 18
FV at Mutated Child #1 at Generation # 21 : 6.791919893373437
FV at Mutated Child #2 at Generation # 21 : 3.521773254268323
--> Family: # 19
FV at Mutated Child #1 at Generation # 21 : 4.500351304325029
FV at Mutated Child #2 at Generation # 21 : 170.4942736176499
--> Family: # 20
FV at Mutated Child #1 at Generation # 21 : 3.044988042725399
FV at Mutated Child #2 at Generation # 21 : 3.044988042725399
--> Family: # 21
FV at Mutated Child #1 at Generation # 21 : 4.313866687985265
FV at Mutated Child #2 at Generation # 21 : 1.4517008591843008
--> Family: # 22
FV at Mutated Child #1 at Generation # 21 : 3.246097144675733
FV at Mutated Child #2 at Generation # 21 : 6.271587042652583
--> Family: # 23
FV at Mutated Child #1 at Generation # 21 : 2427.791928414904
FV at Mutated Child #2 at Generation # 21 : 16.52802896620984
--> Family: # 24
FV at Mutated Child #1 at Generation # 21 : 34.267623778442655
FV at Mutated Child #2 at Generation # 21 : 0.9036212795830473
--> Family: # 25
FV at Mutated Child #1 at Generation # 21 : 62.72445268021555
FV at Mutated Child #2 at Generation # 21 : 8.511004276790654
--> Family: # 26
FV at Mutated Child #1 at Generation # 21 : 27.64760299982658
FV at Mutated Child #2 at Generation # 21 : 2495.792972701957
--> Family: # 27
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FV at Mutated Child #1 at Generation # 21 : 11.24917703880162 FV at Mutated Child #2 at Generation # 21 : 620.0454170390146 --> Family: # 28 FV at Mutated Child #1 at Generation # 21 : 123.6094656753063 FV at Mutated Child #2 at Generation # 21 : 81.4747094603436 --> Family: # 29 FV at Mutated Child #1 at Generation # 21 : 22.17891037877307 FV at Mutated Child #2 at Generation # 21 : 103.0265052192208 --> Family: # 30 FV at Mutated Child #1 at Generation # 21 : 112.89188625340968 FV at Mutated Child #2 at Generation # 21 : 61.113802817549185 --> Family: # 31 FV at Mutated Child #1 at Generation # 21 : 559.2414225718824 FV at Mutated Child #2 at Generation # 21 : 398.19465382418565 --> Family: # 32 FV at Mutated Child #1 at Generation # 21 : 8.930543832409676 FV at Mutated Child #2 at Generation # 21 : 0.8340174027121547 --> Family: # 33 FV at Mutated Child #1 at Generation # 21 : 5.007335558682852 FV at Mutated Child #2 at Generation # 21 : 11.762227076308282 --> Family: # 34 FV at Mutated Child #1 at Generation # 21 : 30.125357996537435 FV at Mutated Child #2 at Generation # 21 : 18.75103398004255 --> Family: # 35 FV at Mutated Child #1 at Generation # 21 : 16.086402798105226 FV at Mutated Child #2 at Generation # 21 : 176.09399747825424 --> Family: # 36 FV at Mutated Child #1 at Generation # 21 : 5.059289221846867 FV at Mutated Child #2 at Generation # 21 : 8.227592934888499 --> Family: # 37 FV at Mutated Child #1 at Generation # 21 : 2153.238838766462 FV at Mutated Child #2 at Generation # 21 : 1.5382243092835746 --> Family: # 38 FV at Mutated Child #1 at Generation # 21 : 24.52844840599365 FV at Mutated Child #2 at Generation # 21 : 33.44633175048206 --> Family: # 39 FV at Mutated Child #1 at Generation # 21 : 3.8466597191591765 FV at Mutated Child #2 at Generation # 21 : 0.9036212795830473 --> Family: # 40 FV at Mutated Child #1 at Generation # 21 : 29.672486046078138 FV at Mutated Child #2 at Generation # 21 : 23.077312253810952 --> Family: # 41 FV at Mutated Child #1 at Generation # 21 : 90.9170504518133

FV at Mutated Child #2 at Generation # 21 : 144.1293967314928 --> Family: # 42

FV at Mutated Child #1 at Generation # 21 : 38.8867698570614

FV at Mutated Child #2 at Generation # 21 : 14.799181934849553 --> Family: # 43 FV at Mutated Child #1 at Generation # 21 : 118.82423519082347 FV at Mutated Child #2 at Generation # 21 : 2.37401669663681 --> Family: # 44 FV at Mutated Child #1 at Generation # 21 : 4.194827557914786 FV at Mutated Child #2 at Generation # 21 : 4.53664275396622 --> Family: # 45 FV at Mutated Child #1 at Generation # 21 : 10.142894637403947 FV at Mutated Child #2 at Generation # 21 : 11.446297478214902 --> Family: # 46 FV at Mutated Child #1 at Generation # 21 : 10.181019539484737 FV at Mutated Child #2 at Generation # 21 : 21.52080985856788 --> Family: # 47 FV at Mutated Child #1 at Generation # 21 : 11.371153400755537 FV at Mutated Child #2 at Generation # 21 : 155.1394331978092 --> Family: # 48 FV at Mutated Child #1 at Generation # 21 : 5.302168960127557 FV at Mutated Child #2 at Generation # 21 : 2440.8264813064798 --> Family: # 49 FV at Mutated Child #1 at Generation # 21 : 3.3029435327241092 FV at Mutated Child #2 at Generation # 21 : 4.114512697455648 --> Family: # 50 FV at Mutated Child #1 at Generation # 21 : 8.339609084152627 FV at Mutated Child #2 at Generation # 21 : 17.72273976126797 --> Family: # 51 FV at Mutated Child #1 at Generation # 21 : 2519.9426058600943 FV at Mutated Child #2 at Generation # 21 : 29.06492868086117 --> Family: # 52 FV at Mutated Child #1 at Generation # 21 : 12.584813344085127 FV at Mutated Child #2 at Generation # 21 : 638.2401144524479 --> Family: # 53 FV at Mutated Child #1 at Generation # 21 : 45.18341652705365 FV at Mutated Child #2 at Generation # 21 : 12.500113848412695 --> Family: # 54 FV at Mutated Child #1 at Generation # 21 : 76.43304468288079 FV at Mutated Child #2 at Generation # 21 : 3.463339681119296 --> Family: # 55 FV at Mutated Child #1 at Generation # 21 : 166.34782233819885 FV at Mutated Child #2 at Generation # 21 : 8.879750262703155 --> Family: # 56 FV at Mutated Child #1 at Generation # 21 : 7.2099585210022274 FV at Mutated Child #2 at Generation # 21 : 3.4214736432595387 --> Family: # 57 FV at Mutated Child #1 at Generation # 21 : 10.075031280147964 FV at Mutated Child #2 at Generation # 21 : 15.843665901841193

--> Family: # 58

FV at Mutated Ch.
FV at Mutated Ch.

FV at Mutated Child #1 at Generation # 21 : 4.426965675688872 FV at Mutated Child #2 at Generation # 21 : 38.44070883019077 --> Family: # 59

FV at Mutated Child #1 at Generation # 21 : 12.194086989046072 FV at Mutated Child #2 at Generation # 21 : 4.234415535899293 --> Family: # 60

FV at Mutated Child #1 at Generation # 21 : 57.95706307088854 FV at Mutated Child #2 at Generation # 21 : 10.09774361674056 --> Family: # 61

FV at Mutated Child #1 at Generation # 21 : 3.6597606787212236 FV at Mutated Child #2 at Generation # 21 : 4.1184307599863486 --> Family: # 62

FV at Mutated Child #1 at Generation # 21 : 134.965102477028 FV at Mutated Child #2 at Generation # 21 : 2.302340789485244 --> Family: # 63

FV at Mutated Child #1 at Generation # 21 : 2.718859377232662 FV at Mutated Child #2 at Generation # 21 : 21.992097245024627 --> Family: # 64

FV at Mutated Child #1 at Generation # 21 : 12.897368745810022 FV at Mutated Child #2 at Generation # 21 : 18.90313066840797 --> Family: # 65

FV at Mutated Child #1 at Generation # 21 : 2.1172141720797892 FV at Mutated Child #2 at Generation # 21 : 3.8937521486854574 --> Family: # 66

FV at Mutated Child #1 at Generation # 21 : 580.4443030390674 FV at Mutated Child #2 at Generation # 21 : 535.815889862649 --> Family: # 67

FV at Mutated Child #1 at Generation # 21 : 614.1545864521502 FV at Mutated Child #2 at Generation # 21 : 153.82130675122679 --> Family: # 68

FV at Mutated Child #1 at Generation # 21 : 66.40620317058375 FV at Mutated Child #2 at Generation # 21 : 7.488753177804422 --> Family: # 69

FV at Mutated Child #1 at Generation # 21 : 113.748228235764 FV at Mutated Child #2 at Generation # 21 : 3.615949365919089

--> Family: # 70

FV at Mutated Child #1 at Generation # 21 : 20.332350130609793 FV at Mutated Child #2 at Generation # 21 : 4.849304681284904 --> Family: # 71

FV at Mutated Child #1 at Generation # 21 : 30.704716895054485 FV at Mutated Child #2 at Generation # 21 : 1.9437393339323794 --> Family: # 72

FV at Mutated Child #1 at Generation # 21 : 22.906519726640372 FV at Mutated Child #2 at Generation # 21 : 152.93835598889078

--> Family: # 73

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FV at Mutated Child #1 at Generation # 21 : 14.641819102170816
FV at Mutated Child #2 at Generation # 21 : 16.232615508188765
--> Family: # 74
FV at Mutated Child #1 at Generation # 21 : 6.679666116434697
FV at Mutated Child #2 at Generation # 21 : 2.080558841803585
--> Family: # 75
FV at Mutated Child #1 at Generation # 21 : 11.174713781056736
FV at Mutated Child #2 at Generation # 21 : 8.034222475370397
--> Family: # 76
FV at Mutated Child #1 at Generation # 21 : 0.8536093521761148
FV at Mutated Child #2 at Generation # 21 : 3.1367580661509
--> Family: # 77
FV at Mutated Child #1 at Generation # 21 : 9.586859957258971
FV at Mutated Child #2 at Generation # 21 : 10.701924693221756
--> Family: # 78
FV at Mutated Child #1 at Generation # 21 : 18.16525046006771
FV at Mutated Child #2 at Generation # 21 : 7.642215349447733
--> Family: # 79
FV at Mutated Child #1 at Generation # 21 : 127.21554425512866
FV at Mutated Child #2 at Generation # 21 : 24.090678840494355
--> Family: # 80
FV at Mutated Child #1 at Generation # 21 : 14.592716533637304
FV at Mutated Child #2 at Generation # 21 : 46.31377091319067
--> Generation: # 22
--> Family: # 1
FV at Mutated Child #1 at Generation # 22 : 0.6112621848126094
FV at Mutated Child #2 at Generation # 22 : 27.541035105592258
--> Family: # 2
FV at Mutated Child #1 at Generation # 22 : 25.07576564870133
FV at Mutated Child #2 at Generation # 22 : 3.4415248801805904
--> Family: # 3
FV at Mutated Child #1 at Generation # 22 : 0.7505196537975408
FV at Mutated Child #2 at Generation # 22 : 0.8509585985466857
--> Family: # 4
FV at Mutated Child #1 at Generation # 22 : 10.748369539212149
FV at Mutated Child #2 at Generation # 22 : 0.5530647240689821
--> Family: # 5
FV at Mutated Child #1 at Generation # 22 : 0.5665335230382995
FV at Mutated Child #2 at Generation # 22 : 1.3217189492619417
--> Family: # 6
FV at Mutated Child #1 at Generation # 22 : 2.2681469882381067
FV at Mutated Child #2 at Generation # 22 : 72.98924743731766
--> Family: # 7
FV at Mutated Child #1 at Generation # 22 : 94.35795385305799
FV at Mutated Child #2 at Generation # 22 : 1.5045201325384752
--> Family: # 8
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FV at Mutated Child #1 at Generation # 22 : 101.59170471821696
FV at Mutated Child #2 at Generation # 22 : 1.0422361996970462
--> Family: # 9
FV at Mutated Child #1 at Generation # 22 : 1.375641359599562
FV at Mutated Child #2 at Generation # 22 : 13.190221836772517
--> Family: # 10
FV at Mutated Child #1 at Generation # 22 : 3.712132107869941
FV at Mutated Child #2 at Generation # 22 : 38.354721547348085
--> Family: # 11
FV at Mutated Child #1 at Generation # 22 : 89.52004344307488
FV at Mutated Child #2 at Generation # 22 : 0.651657029093141
--> Family: # 12
FV at Mutated Child #1 at Generation # 22 : 0.5060797826117442
FV at Mutated Child #2 at Generation # 22 : 2.475487323849531
--> Family: # 13
FV at Mutated Child #1 at Generation # 22 : 21.018539040936428
FV at Mutated Child #2 at Generation # 22 : 25.320273307422703
--> Family: # 14
FV at Mutated Child #1 at Generation # 22 : 0.8481717037541292
FV at Mutated Child #2 at Generation # 22 : 547.6972375547083
--> Family: # 15
FV at Mutated Child #1 at Generation # 22 : 12.826799684416216
FV at Mutated Child #2 at Generation # 22 : 0.734737218305455
--> Family: # 16
FV at Mutated Child #1 at Generation # 22 : 6.709345990647016
FV at Mutated Child #2 at Generation # 22 : 3.531633809321871
--> Family: # 17
FV at Mutated Child #1 at Generation # 22 : 1.8588176279567847
FV at Mutated Child #2 at Generation # 22 : 2.6601709920825787
--> Family: # 18
FV at Mutated Child #1 at Generation # 22 : 0.5257018468368678
FV at Mutated Child #2 at Generation # 22 : 31.18740515064114
--> Family: # 19
FV at Mutated Child #1 at Generation # 22 : 3.0010052182748734
FV at Mutated Child #2 at Generation # 22 : 3.3628305602394617
--> Family: # 20
FV at Mutated Child #1 at Generation # 22 : 1.1263360009731058
FV at Mutated Child #2 at Generation # 22 : 144.36036761988439
--> Family: # 21
FV at Mutated Child #1 at Generation # 22 : 125.84640236363646
FV at Mutated Child #2 at Generation # 22 : 0.7902689697194611
--> Family: # 22
FV at Mutated Child #1 at Generation # 22 : 19.53557525891249
FV at Mutated Child #2 at Generation # 22 : 1.765324097604627
--> Family: # 23
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FV at Mutated Child #1 at Generation # 22 : 0.8636258658678935 FV at Mutated Child #2 at Generation # 22 : 81.32819474474208 --> Family: # 24 FV at Mutated Child #1 at Generation # 22 : 58.55299431766333 FV at Mutated Child #2 at Generation # 22 : 1.690152961098673 --> Family: # 25 FV at Mutated Child #1 at Generation # 22 : 5.899322976861159 FV at Mutated Child #2 at Generation # 22 : 0.502435831089661 --> Family: # 26 FV at Mutated Child #1 at Generation # 22 : 1.4890047866959204 FV at Mutated Child #2 at Generation # 22 : 24.618425936792278 --> Family: # 27 FV at Mutated Child #1 at Generation # 22 : 2.6983622214147083 FV at Mutated Child #2 at Generation # 22 : 122.68351357756148 --> Family: # 28 FV at Mutated Child #1 at Generation # 22 : 94.59773656923271 FV at Mutated Child #2 at Generation # 22 : 2264.6043235119046 --> Family: # 29 FV at Mutated Child #1 at Generation # 22 : 11.016761653071052 FV at Mutated Child #2 at Generation # 22 : 3.097947677009219 --> Family: # 30 FV at Mutated Child #1 at Generation # 22 : 1.0842260268393231 FV at Mutated Child #2 at Generation # 22 : 542.23563160755 --> Family: # 31 FV at Mutated Child #1 at Generation # 22 : 0.7806799260698278 FV at Mutated Child #2 at Generation # 22 : 3.24544470683633 --> Family: # 32 FV at Mutated Child #1 at Generation # 22 : 0.7682480115311507 FV at Mutated Child #2 at Generation # 22 : 5.551631607051836 --> Family: # 33 FV at Mutated Child #1 at Generation # 22 : 0.743898609950705 FV at Mutated Child #2 at Generation # 22 : 0.9923482389796474 --> Family: # 34 FV at Mutated Child #1 at Generation # 22 : 3.644617383683521 FV at Mutated Child #2 at Generation # 22 : 5.945869630057353 --> Family: # 35 FV at Mutated Child #1 at Generation # 22 : 0.5077028609064941 FV at Mutated Child #2 at Generation # 22 : 6.682297010295104 --> Family: # 36 FV at Mutated Child #1 at Generation # 22 : 123.29851478280078 FV at Mutated Child #2 at Generation # 22 : 1.5045201325384752 --> Family: # 37 FV at Mutated Child #1 at Generation # 22 : 546.4141602428642 FV at Mutated Child #2 at Generation # 22 : 472.88846335067547 --> Family: # 38

FV at Mutated Child #1 at Generation # 22 : 1.1853325240141148

FV at Mutated Child #2 at Generation # 22 : 23.745439509373295 --> Family: # 39 FV at Mutated Child #1 at Generation # 22 : 26.242128525280837 FV at Mutated Child #2 at Generation # 22 : 0.577417357954175 --> Family: # 40 FV at Mutated Child #1 at Generation # 22 : 8.95143639129507 FV at Mutated Child #2 at Generation # 22 : 1.4592875106951828 --> Family: # 41 FV at Mutated Child #1 at Generation # 22 : 5.327759481856039 FV at Mutated Child #2 at Generation # 22 : 2.569402086481077 --> Family: # 42 FV at Mutated Child #1 at Generation # 22 : 102.48872997912225 FV at Mutated Child #2 at Generation # 22 : 0.629843423557146 --> Family: # 43 FV at Mutated Child #1 at Generation # 22 : 22.186817232716017 FV at Mutated Child #2 at Generation # 22 : 2.9848655819716474 --> Family: # 44 FV at Mutated Child #1 at Generation # 22 : 518.1786954335448 FV at Mutated Child #2 at Generation # 22 : 3.658914467739548 --> Family: # 45 FV at Mutated Child #1 at Generation # 22 : 72.12097640092405 FV at Mutated Child #2 at Generation # 22 : 450.8722178659793 --> Family: # 46 FV at Mutated Child #1 at Generation # 22 : 2.3300035634562164 FV at Mutated Child #2 at Generation # 22 : 530.67278682344 --> Family: # 47 FV at Mutated Child #1 at Generation # 22 : 133.33233324243838 FV at Mutated Child #2 at Generation # 22 : 130.42024617633382 --> Family: # 48 FV at Mutated Child #1 at Generation # 22 : 662.1047303424566 FV at Mutated Child #2 at Generation # 22 : 550.1832823870451 --> Family: # 49 FV at Mutated Child #1 at Generation # 22 : 3.692373740719227 FV at Mutated Child #2 at Generation # 22 : 0.7278483066254186 --> Family: # 50 FV at Mutated Child #1 at Generation # 22 : 1.8380097568511418 FV at Mutated Child #2 at Generation # 22 : 3.0331523674534586 --> Family: # 51 FV at Mutated Child #1 at Generation # 22 : 14.117013269802008 FV at Mutated Child #2 at Generation # 22 : 0.7809596669126562 --> Family: # 52 FV at Mutated Child #1 at Generation # 22 : 5.0678981816298085 FV at Mutated Child #2 at Generation # 22 : 6.962501666734186 --> Family: # 53 FV at Mutated Child #1 at Generation # 22 : 122.95195163488559

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FV at Mutated Child #2 at Generation # 22 : 113.33117703985062

--> Family: # 54

FV at Mutated Ch

FV at Mutated Child #1 at Generation # 22 : 0.6788790889738445 FV at Mutated Child #2 at Generation # 22 : 22.118270196707808 --> Family: # 55

FV at Mutated Child #1 at Generation # 22 : 0.7804630353669799
FV at Mutated Child #2 at Generation # 22 : 4.072332290124418
--> Family: # 56

FV at Mutated Child #1 at Generation # 22 : 68.31519512232971 FV at Mutated Child #2 at Generation # 22 : 6.39485805270628 --> Family: # 57

FV at Mutated Child #1 at Generation # 22 : 607.504883364523 FV at Mutated Child #2 at Generation # 22 : 33.170260979490344 --> Family: # 58

FV at Mutated Child #1 at Generation # 22 : 2.231497179694386 FV at Mutated Child #2 at Generation # 22 : 0.4563402610013424 --> Family: # 59

FV at Mutated Child #1 at Generation # 22 : 3.8264541220623642 FV at Mutated Child #2 at Generation # 22 : 1.4767685718869514 --> Family: # 60

FV at Mutated Child #1 at Generation # 22 : 0.6332605477710953 FV at Mutated Child #2 at Generation # 22 : 2191.5773004945804 --> Family: # 61

FV at Mutated Child #1 at Generation # 22 : 0.42615815572037474 FV at Mutated Child #2 at Generation # 22 : 7.246705238049423 --> Family: # 62

FV at Mutated Child #1 at Generation # 22 : 10.209346052928755 FV at Mutated Child #2 at Generation # 22 : 6.407159457984676 --> Family: # 63

FV at Mutated Child #1 at Generation # 22 : 2.305039581386701 FV at Mutated Child #2 at Generation # 22 : 9.197244002483883 --> Family: # 64

FV at Mutated Child #1 at Generation # 22 : 0.7715220957475848 FV at Mutated Child #2 at Generation # 22 : 8.290607724174867 --> Family: # 65

FV at Mutated Child #1 at Generation # 22 : 0.5785651814574688 FV at Mutated Child #2 at Generation # 22 : 110.99341152617977 --> Family: # 66

FV at Mutated Child #1 at Generation # 22 : 10.205194617391319
FV at Mutated Child #2 at Generation # 22 : 535.2252526861554
--> Family: # 67

FV at Mutated Child #1 at Generation # 22 : 0.9150998239275353 FV at Mutated Child #2 at Generation # 22 : 546.6542923614137 --> Family: # 68

FV at Mutated Child #1 at Generation # 22 : 2.5029862547272153 FV at Mutated Child #2 at Generation # 22 : 0.643572019512948 --> Family: # 69

```
FV at Mutated Child #1 at Generation # 22 : 2437.349039557433
FV at Mutated Child #2 at Generation # 22 : 2.2236482095288554
--> Family: # 70
FV at Mutated Child #1 at Generation # 22 : 0.503245718006583
FV at Mutated Child #2 at Generation # 22 : 0.46201949041671525
--> Family: # 71
FV at Mutated Child #1 at Generation # 22 : 84.83917142396369
FV at Mutated Child #2 at Generation # 22 : 1.3190221468851486
--> Family: # 72
FV at Mutated Child #1 at Generation # 22 : 7.820256795539921
FV at Mutated Child #2 at Generation # 22 : 22.868746220864622
--> Family: # 73
FV at Mutated Child #1 at Generation # 22 : 16.160981647310784
FV at Mutated Child #2 at Generation # 22 : 73.76999058099828
--> Family: # 74
FV at Mutated Child #1 at Generation # 22 : 99.14540866185666
FV at Mutated Child #2 at Generation # 22 : 0.7370507800777493
--> Family: # 75
FV at Mutated Child #1 at Generation # 22 : 3.991470470566956
FV at Mutated Child #2 at Generation # 22 : 1.8912318819353788
--> Family: # 76
FV at Mutated Child #1 at Generation # 22 : 0.7209573806765431
FV at Mutated Child #2 at Generation # 22 : 9.04066098748627
--> Family: # 77
FV at Mutated Child #1 at Generation # 22 : 2328.8163900012046
FV at Mutated Child #2 at Generation # 22 : 1.5133636987070687
--> Family: # 78
FV at Mutated Child #1 at Generation # 22 : 0.49152522826934514
FV at Mutated Child #2 at Generation # 22 : 563.807070463343
--> Family: # 79
FV at Mutated Child #1 at Generation # 22 : 1.5994999914732246
FV at Mutated Child #2 at Generation # 22 : 507.7638240320208
--> Family: # 80
FV at Mutated Child #1 at Generation # 22 : 0.6648988571420367
FV at Mutated Child #2 at Generation # 22 : 518.1807136406088
--> Generation: # 23
--> Family: # 1
FV at Mutated Child #1 at Generation # 23 : 28.021586342486735
FV at Mutated Child #2 at Generation # 23 : 18.989996546698055
--> Family: # 2
FV at Mutated Child #1 at Generation # 23 : 1.6821350960301062
FV at Mutated Child #2 at Generation # 23 : 619.305137925044
--> Family: # 3
FV at Mutated Child #1 at Generation # 23 : 612.6866666019347
FV at Mutated Child #2 at Generation # 23 : 40.894706205540665
--> Family: # 4
```

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FV at Mutated Child #1 at Generation # 23 : 17.669219099692036
FV at Mutated Child #2 at Generation # 23 : 11.468788950346756
--> Family: # 5
FV at Mutated Child #1 at Generation # 23 : 28.84329777594604
FV at Mutated Child #2 at Generation # 23 : 9.029999194331655
--> Family: # 6
FV at Mutated Child #1 at Generation # 23 : 7.19814265964461
FV at Mutated Child #2 at Generation # 23 : 20.37139830878109
--> Family: # 7
FV at Mutated Child #1 at Generation # 23 : 2.1428379240713245
FV at Mutated Child #2 at Generation # 23 : 577.1500503345032
--> Family: # 8
FV at Mutated Child #1 at Generation # 23 : 1.2284427611992204
FV at Mutated Child #2 at Generation # 23 : 3.792814382446082
--> Family: # 9
FV at Mutated Child #1 at Generation # 23 : 4.5968823870805435
FV at Mutated Child #2 at Generation # 23 : 24.031953227211705
--> Family: # 10
FV at Mutated Child #1 at Generation # 23 : 42.774913747735035
FV at Mutated Child #2 at Generation # 23 : 119.8397236236058
--> Family: # 11
FV at Mutated Child #1 at Generation # 23 : 3.1429290721280787
FV at Mutated Child #2 at Generation # 23 : 14.843022209327778
--> Family: # 12
FV at Mutated Child #1 at Generation # 23 : 46.37787726588379
FV at Mutated Child #2 at Generation # 23 : 7.09630023361232
--> Family: # 13
FV at Mutated Child #1 at Generation # 23 : 505.895797195966
FV at Mutated Child #2 at Generation # 23 : 3.681098311943369
--> Family: # 14
FV at Mutated Child #1 at Generation # 23 : 2254.986049228657
FV at Mutated Child #2 at Generation # 23 : 26.267799591504478
--> Family: # 15
FV at Mutated Child #1 at Generation # 23 : 8.202868427725033
FV at Mutated Child #2 at Generation # 23 : 10.651441160899822
--> Family: # 16
FV at Mutated Child #1 at Generation # 23 : 17.911702404015788
FV at Mutated Child #2 at Generation # 23 : 7.4864612445872405
--> Family: # 17
FV at Mutated Child #1 at Generation # 23 : 605.8295840617014
FV at Mutated Child #2 at Generation # 23 : 13.23120232684099
--> Family: # 18
FV at Mutated Child #1 at Generation # 23 : 3.1085967570797157
FV at Mutated Child #2 at Generation # 23 : 16.173323920450006
--> Family: # 19
```

FV at Mutated Child #1 at Generation # 23 : 6.02499030479443 FV at Mutated Child #2 at Generation # 23 : 56.37919118647814 --> Family: # 20 FV at Mutated Child #1 at Generation # 23 : 194.08813120495998 FV at Mutated Child #2 at Generation # 23 : 47.067349236030864 --> Family: # 21 FV at Mutated Child #1 at Generation # 23 : 27.783162566443504 FV at Mutated Child #2 at Generation # 23 : 7.621633024357083 --> Family: # 22 FV at Mutated Child #1 at Generation # 23 : 50.90523262522877 FV at Mutated Child #2 at Generation # 23 : 6.341942481869103 --> Family: # 23 FV at Mutated Child #1 at Generation # 23 : 156.02086072432866 FV at Mutated Child #2 at Generation # 23 : 30.460712905441003 --> Family: # 24 FV at Mutated Child #1 at Generation # 23 : 1.298386798438651 FV at Mutated Child #2 at Generation # 23 : 4.213043463902708 --> Family: # 25 FV at Mutated Child #1 at Generation # 23 : 132.98625799633407 FV at Mutated Child #2 at Generation # 23 : 22.045026931400436 --> Family: # 26 FV at Mutated Child #1 at Generation # 23 : 3.5452888714440394 FV at Mutated Child #2 at Generation # 23 : 1.8226147459723858 --> Family: # 27 FV at Mutated Child #1 at Generation # 23 : 3.7247716325563456 FV at Mutated Child #2 at Generation # 23 : 131.62599311873305 --> Family: # 28 FV at Mutated Child #1 at Generation # 23 : 1.1601201752830976 FV at Mutated Child #2 at Generation # 23 : 36.79756556336743 --> Family: # 29 FV at Mutated Child #1 at Generation # 23 : 188.35007030771354 FV at Mutated Child #2 at Generation # 23 : 39.229884173854735 --> Family: # 30 FV at Mutated Child #1 at Generation # 23 : 4.010311264442892 FV at Mutated Child #2 at Generation # 23 : 3.2093030972435086 --> Family: # 31 FV at Mutated Child #1 at Generation # 23 : 161.36185554926087 FV at Mutated Child #2 at Generation # 23 : 127.9619246360124 --> Family: # 32 FV at Mutated Child #1 at Generation # 23 : 536.9437675055931 FV at Mutated Child #2 at Generation # 23 : 8.930543832409676 --> Family: # 33 FV at Mutated Child #1 at Generation # 23 : 139.6108434994112 FV at Mutated Child #2 at Generation # 23 : 3.2381778208155336

--> Family: # 34

FV at Mutated Child #1 at Generation # 23 : 9.512845768629631

FV at Mutated Child #2 at Generation # 23 : 42.128276833085934 --> Family: # 35 FV at Mutated Child #1 at Generation # 23 : 28.288147455257803 FV at Mutated Child #2 at Generation # 23 : 2.05006809040759 --> Family: # 36 FV at Mutated Child #1 at Generation # 23 : 11.411516665585584 FV at Mutated Child #2 at Generation # 23 : 14.902049718133583 --> Family: # 37 FV at Mutated Child #1 at Generation # 23 : 39.908531320601554 FV at Mutated Child #2 at Generation # 23 : 15.359157979145387 --> Family: # 38 FV at Mutated Child #1 at Generation # 23 : 119.8397236236058 FV at Mutated Child #2 at Generation # 23 : 2.6147397766014526 --> Family: # 39 FV at Mutated Child #1 at Generation # 23 : 617.6054575336854 FV at Mutated Child #2 at Generation # 23 : 635.5991705950813 --> Family: # 40 FV at Mutated Child #1 at Generation # 23 : 27.862559953039 FV at Mutated Child #2 at Generation # 23 : 134.69044448323052 --> Family: # 41 FV at Mutated Child #1 at Generation # 23 : 6.807845036576507 FV at Mutated Child #2 at Generation # 23 : 25.852436027319417 --> Family: # 42 FV at Mutated Child #1 at Generation # 23 : 593.0898424766451 FV at Mutated Child #2 at Generation # 23 : 1.7903128298934057 --> Family: # 43 FV at Mutated Child #1 at Generation # 23 : 15.795702644690719 FV at Mutated Child #2 at Generation # 23 : 1.9795173540328737 --> Family: # 44 FV at Mutated Child #1 at Generation # 23 : 24.165941956794683 FV at Mutated Child #2 at Generation # 23 : 7.651360176666713 --> Family: # 45 FV at Mutated Child #1 at Generation # 23 : 41.18198603113282 FV at Mutated Child #2 at Generation # 23 : 6.443434008324042 --> Family: # 46 FV at Mutated Child #1 at Generation # 23 : 639.5028065995912 FV at Mutated Child #2 at Generation # 23 : 158.30364076479844 --> Family: # 47 FV at Mutated Child #1 at Generation # 23 : 3.8853340975606763 FV at Mutated Child #2 at Generation # 23 : 52842.68473016406 --> Family: # 48 FV at Mutated Child #1 at Generation # 23 : 225.99884668516904 FV at Mutated Child #2 at Generation # 23 : 8.086588681298673 --> Family: # 49 FV at Mutated Child #1 at Generation # 23 : 12.86033549945629

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FV at Mutated Child #2 at Generation # 23 : 30.503918764248834

--> Family: # 50 FV at Mutated Child #1 at Generation # 23 : 32.250526050412674 FV at Mutated Child #2 at Generation # 23 : 369.7297905160548 --> Family: # 51 --> Family: # 52 --> Family: # 53 --> Family: # 54 --> Family: # 55 --> Family: # 56 --> Family: # 57

FV at Mutated Child #1 at Generation # 23 : 3.4935264717851293 FV at Mutated Child #2 at Generation # 23 : 0.8796506270634444 FV at Mutated Child #1 at Generation # 23 : 19.19313741387162 FV at Mutated Child #2 at Generation # 23 : 49.46230190104857 FV at Mutated Child #1 at Generation # 23 : 10.023130949987365 FV at Mutated Child #2 at Generation # 23 : 1.5969225298411223 FV at Mutated Child #1 at Generation # 23 : 17.915859324708396 FV at Mutated Child #2 at Generation # 23 : 27.72555803389782 FV at Mutated Child #1 at Generation # 23 : 16.63045032900859 FV at Mutated Child #2 at Generation # 23 : 1.8470876754853718 FV at Mutated Child #1 at Generation # 23 : 11.802598225020127 FV at Mutated Child #2 at Generation # 23 : 12.364387380396066 FV at Mutated Child #1 at Generation # 23 : 11.925345162073436 FV at Mutated Child #2 at Generation # 23 : 3.099639708629289 --> Family: # 58 FV at Mutated Child #1 at Generation # 23 : 220.10448674627972 FV at Mutated Child #2 at Generation # 23 : 7.707410999772771 --> Family: # 59 FV at Mutated Child #1 at Generation # 23 : 35.69898231043215 FV at Mutated Child #2 at Generation # 23 : 4.419463654203659 --> Family: # 60 FV at Mutated Child #1 at Generation # 23 : 8.482418045610316 FV at Mutated Child #2 at Generation # 23 : 21.391809987159935 --> Family: # 61 FV at Mutated Child #1 at Generation # 23 : 9.271327567094673 FV at Mutated Child #2 at Generation # 23 : 9.931187894885081 --> Family: # 62 FV at Mutated Child #1 at Generation # 23 : 2.756919321652595 FV at Mutated Child #2 at Generation # 23 : 1.713357512090695 --> Family: # 63 FV at Mutated Child #1 at Generation # 23 : 2.1716479778193523 FV at Mutated Child #2 at Generation # 23 : 161.07843503821266 --> Family: # 64

FV at Mutated Child #1 at Generation # 23 : 18.789017129697513

FV at Mutated Child #2 at Generation # 23 : 9.711688686460404 --> Family: # 65

```
FV at Mutated Child #1 at Generation # 23 : 81.42677539038056
FV at Mutated Child #2 at Generation # 23 : 10.428494988231591
--> Family: # 66
FV at Mutated Child #1 at Generation # 23 : 159.23012810497127
FV at Mutated Child #2 at Generation # 23 : 11.397498864786657
--> Family: # 67
FV at Mutated Child #1 at Generation # 23 : 11.84363707119244
FV at Mutated Child #2 at Generation # 23 : 10.387511181769248
--> Family: # 68
FV at Mutated Child #1 at Generation # 23 : 2.9500858690972698
FV at Mutated Child #2 at Generation # 23 : 18.246944276319883
--> Family: # 69
FV at Mutated Child #1 at Generation # 23 : 76.7885224176424
FV at Mutated Child #2 at Generation # 23 : 139.03678845714978
--> Family: # 70
FV at Mutated Child #1 at Generation # 23 : 4.067911333174607
FV at Mutated Child #2 at Generation # 23 : 155.0698845856909
--> Family: # 71
FV at Mutated Child #1 at Generation # 23 : 0.9717131165432638
FV at Mutated Child #2 at Generation # 23 : 70.10129645440136
--> Family: # 72
FV at Mutated Child #1 at Generation # 23 : 14.092447141404882
FV at Mutated Child #2 at Generation # 23 : 22.8756086968112
--> Family: # 73
FV at Mutated Child #1 at Generation # 23 : 6.352661402177301
FV at Mutated Child #2 at Generation # 23 : 225.26567312131596
--> Family: # 74
FV at Mutated Child #1 at Generation # 23 : 40.79646075795252
FV at Mutated Child #2 at Generation # 23 : 10.114238274520307
--> Family: # 75
FV at Mutated Child #1 at Generation # 23 : 36.38861419991486
FV at Mutated Child #2 at Generation # 23 : 30.312332329576172
--> Family: # 76
FV at Mutated Child #1 at Generation # 23 : 27.684216544122748
FV at Mutated Child #2 at Generation # 23 : 43.271970751972404
--> Family: # 77
FV at Mutated Child #1 at Generation # 23 : 3.5235050269995205
FV at Mutated Child #2 at Generation # 23 : 4.908053083681261
--> Family: # 78
FV at Mutated Child #1 at Generation # 23 : 14.79506259721228
FV at Mutated Child #2 at Generation # 23 : 6.1079435590989
--> Family: # 79
FV at Mutated Child #1 at Generation # 23 : 3.266313255772525
FV at Mutated Child #2 at Generation # 23 : 30.312332329576172
--> Family: # 80
```

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FV at Mutated Child #1 at Generation # 23 : 3.280061191564571 FV at Mutated Child #2 at Generation # 23 : 19.859837350290643 --> Generation: # 24 --> Family: # 1 FV at Mutated Child #1 at Generation # 24 : 1.2329226305491745 FV at Mutated Child #2 at Generation # 24 : 31.461708230856967 --> Family: # 2 FV at Mutated Child #1 at Generation # 24 : 3.418886750724159 FV at Mutated Child #2 at Generation # 24 : 0.7595579550359332 --> Family: # 3 FV at Mutated Child #1 at Generation # 24 : 61.43374228995037 FV at Mutated Child #2 at Generation # 24 : 1.1709427525504807 --> Family: # 4 FV at Mutated Child #1 at Generation # 24 : 114.93572974206461 FV at Mutated Child #2 at Generation # 24 : 7.836219933320175 --> Family: # 5 FV at Mutated Child #1 at Generation # 24 : 18.771835142284647 FV at Mutated Child #2 at Generation # 24 : 460.46713375489065 --> Family: # 6 FV at Mutated Child #1 at Generation # 24 : 0.7496125507802925 FV at Mutated Child #2 at Generation # 24 : 5.234135186421303 --> Family: # 7 FV at Mutated Child #1 at Generation # 24 : 0.4860627128406574 FV at Mutated Child #2 at Generation # 24 : 1.715195620509363 --> Family: # 8 FV at Mutated Child #1 at Generation # 24 : 2.1940152381438986 FV at Mutated Child #2 at Generation # 24 : 0.5272162690380893 --> Family: # 9 FV at Mutated Child #1 at Generation # 24 : 1.944127987230623 FV at Mutated Child #2 at Generation # 24 : 91.32026805615816 --> Family: # 10 FV at Mutated Child #1 at Generation # 24 : 0.8183472230900772 FV at Mutated Child #2 at Generation # 24 : 4.120308118170665 --> Family: # 11 FV at Mutated Child #1 at Generation # 24 : 0.9621777602761179 FV at Mutated Child #2 at Generation # 24 : 6.538329962781298 --> Family: # 12 FV at Mutated Child #1 at Generation # 24 : 6.295284029629447 FV at Mutated Child #2 at Generation # 24 : 83.94480418128947 --> Family: # 13 FV at Mutated Child #1 at Generation # 24 : 15.099320759156104 FV at Mutated Child #2 at Generation # 24 : 0.9755450702879924 --> Family: # 14 FV at Mutated Child #1 at Generation # 24 : 0.633265625433456 FV at Mutated Child #2 at Generation # 24 : 546.6608568713071 --> Family: # 15

FV at Mutated Child #1 at Generation # 24 : 0.4472592812348655 FV at Mutated Child #2 at Generation # 24 : 24.271046291005078 --> Family: # 16 FV at Mutated Child #1 at Generation # 24 : 4.60702025053151 FV at Mutated Child #2 at Generation # 24 : 9.371597757760656 --> Family: # 17 FV at Mutated Child #1 at Generation # 24 : 0.9175368633198937 FV at Mutated Child #2 at Generation # 24 : 97.04930799968959 --> Family: # 18 FV at Mutated Child #1 at Generation # 24 : 7.453084515325918 FV at Mutated Child #2 at Generation # 24 : 2.392750708114817 --> Family: # 19 FV at Mutated Child #1 at Generation # 24 : 3.1815944145374555 FV at Mutated Child #2 at Generation # 24 : 4.99982828828297 --> Family: # 20 FV at Mutated Child #1 at Generation # 24 : 2.467402771532688 FV at Mutated Child #2 at Generation # 24 : 26.563978964588074 --> Family: # 21 FV at Mutated Child #1 at Generation # 24 : 1.0458654123986817 FV at Mutated Child #2 at Generation # 24 : 19.119451876508478 --> Family: # 22 FV at Mutated Child #1 at Generation # 24 : 9.428843106432321 FV at Mutated Child #2 at Generation # 24 : 0.6854012771434906 --> Family: # 23 FV at Mutated Child #1 at Generation # 24 : 7.686636603125623 FV at Mutated Child #2 at Generation # 24 : 2.813249036849712 --> Family: # 24 FV at Mutated Child #1 at Generation # 24 : 528.3544242917983 FV at Mutated Child #2 at Generation # 24 : 0.7588439502017728 --> Family: # 25 FV at Mutated Child #1 at Generation # 24 : 1.8754635789646694 FV at Mutated Child #2 at Generation # 24 : 117.49554868943414 --> Family: # 26 FV at Mutated Child #1 at Generation # 24 : 18.039048248660936 FV at Mutated Child #2 at Generation # 24 : 7.473947917291573 --> Family: # 27 FV at Mutated Child #1 at Generation # 24 : 1.8873052859796686 FV at Mutated Child #2 at Generation # 24 : 5.246185607970464 --> Family: # 28 FV at Mutated Child #1 at Generation # 24 : 20.07835485446365 FV at Mutated Child #2 at Generation # 24 : 22.446056870756482 --> Family: # 29 FV at Mutated Child #1 at Generation # 24 : 28.81191787048836

FV at Mutated Child #2 at Generation # 24 : 20.999674914394525 --> Family: # 30

FV at Mutated Child #1 at Generation # 24 : 1.6540453244009306

FV at Mutated Child #2 at Generation # 24 : 1.6417287410163697 --> Family: # 31 FV at Mutated Child #1 at Generation # 24 : 7.723784519148635 FV at Mutated Child #2 at Generation # 24 : 0.7515421760890938 --> Family: # 32 FV at Mutated Child #1 at Generation # 24 : 4.961591820700188 FV at Mutated Child #2 at Generation # 24 : 439.3255990467338 --> Family: # 33 FV at Mutated Child #1 at Generation # 24 : 25.8042054555221 FV at Mutated Child #2 at Generation # 24 : 0.9133866544790765 --> Family: # 34 FV at Mutated Child #1 at Generation # 24 : 1.2568823403809446 FV at Mutated Child #2 at Generation # 24 : 1.356569400862776 --> Family: # 35 FV at Mutated Child #1 at Generation # 24 : 1.3563340056972981 FV at Mutated Child #2 at Generation # 24 : 31.191394737306993 --> Family: # 36 FV at Mutated Child #1 at Generation # 24 : 3.9662928602383953 FV at Mutated Child #2 at Generation # 24 : 496.31878847869115 --> Family: # 37 FV at Mutated Child #1 at Generation # 24 : 2.4695417367994383 FV at Mutated Child #2 at Generation # 24 : 38.53306794770629 --> Family: # 38 FV at Mutated Child #1 at Generation # 24 : 136.8532573352083 FV at Mutated Child #2 at Generation # 24 : 14.480936861295241 --> Family: # 39 FV at Mutated Child #1 at Generation # 24 : 31.655911789331522 FV at Mutated Child #2 at Generation # 24 : 1.2135271660515923 --> Family: # 40 FV at Mutated Child #1 at Generation # 24 : 3.7994385332810428 FV at Mutated Child #2 at Generation # 24 : 18.70157389720211 --> Family: # 41 FV at Mutated Child #1 at Generation # 24 : 4.4651733993533 FV at Mutated Child #2 at Generation # 24 : 11.831818819607065 --> Family: # 42 FV at Mutated Child #1 at Generation # 24 : 0.7724047329245474 FV at Mutated Child #2 at Generation # 24 : 1.7733957567165075 --> Family: # 43 FV at Mutated Child #1 at Generation # 24 : 5.784010598042018 FV at Mutated Child #2 at Generation # 24 : 7.519145146578575 --> Family: # 44 FV at Mutated Child #1 at Generation # 24 : 3.877612582079017 FV at Mutated Child #2 at Generation # 24 : 0.6811378404779103 --> Family: # 45 FV at Mutated Child #1 at Generation # 24 : 1.6099830240643451 FV at Mutated Child #2 at Generation # 24 : 583.7903822310922

--> Family: # 46

FV at Mutated Child #1 at Generation # 24 : 0.9769827843333565 FV at Mutated Child #2 at Generation # 24 : 0.835230840721226

--> Family: # 47

FV at Mutated Child #1 at Generation # 24 : 0.5960020722709721 FV at Mutated Child #2 at Generation # 24 : 1.9869612673437573

--> Family: # 48

FV at Mutated Child #1 at Generation # 24 : 10.613338764954914 FV at Mutated Child #2 at Generation # 24 : 0.3748175774730738

--> Family: # 49

FV at Mutated Child #1 at Generation # 24 : 3.3770151403522846 FV at Mutated Child #2 at Generation # 24 : 0.3871466781111873

--> Family: # 50

FV at Mutated Child #1 at Generation # 24 : 4.0436071063611525 FV at Mutated Child #2 at Generation # 24 : 9.104370131001962 --> Family: # 51

FV at Mutated Child #1 at Generation # 24 : 0.6960499872352205 FV at Mutated Child #2 at Generation # 24 : 562.2686056700311 --> Family: # 52

FV at Mutated Child #1 at Generation # 24 : 6.150975932946078 FV at Mutated Child #2 at Generation # 24 : 28.775811170815796 --> Family: # 53

FV at Mutated Child #1 at Generation # 24 : 3.4792973067943027 FV at Mutated Child #2 at Generation # 24 : 66.54331928384711 --> Family: # 54

FV at Mutated Child #1 at Generation # 24 : 0.7146630752531526 FV at Mutated Child #2 at Generation # 24 : 17.924253922371413 --> Family: # 55

FV at Mutated Child #1 at Generation # 24 : 129.4850170979724 FV at Mutated Child #2 at Generation # 24 : 160.40423206834225 --> Family: # 56

FV at Mutated Child #1 at Generation # 24 : 18.950053929311196 FV at Mutated Child #2 at Generation # 24 : 50.67724100350941 --> Family: # 57

FV at Mutated Child #1 at Generation # 24 : 0.7079496450230558 FV at Mutated Child #2 at Generation # 24 : 0.7695057274052993 --> Family: # 58

FV at Mutated Child #1 at Generation # 24 : 0.871611460456181 FV at Mutated Child #2 at Generation # 24 : 31.32640243608364 --> Family: # 59

FV at Mutated Child #1 at Generation # 24 : 393.52212569465144 FV at Mutated Child #2 at Generation # 24 : 120.25427907228617 --> Family: # 60

FV at Mutated Child #1 at Generation # 24 : 6.190540326669477
FV at Mutated Child #2 at Generation # 24 : 0.8282594053973489
--> Family: # 61

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FV at Mutated Child #1 at Generation # 24 : 33.87052536034281
FV at Mutated Child #2 at Generation # 24 : 89.66991414441902
--> Family: # 62
FV at Mutated Child #1 at Generation # 24 : 2409.212473493304
FV at Mutated Child #2 at Generation # 24 : 101.03529882839948
--> Family: # 63
FV at Mutated Child #1 at Generation # 24 : 0.708655306362554
FV at Mutated Child #2 at Generation # 24 : 93.45509425717566
--> Family: # 64
FV at Mutated Child #1 at Generation # 24 : 4.355517887045057
FV at Mutated Child #2 at Generation # 24 : 0.6845897091442984
--> Family: # 65
FV at Mutated Child #1 at Generation # 24 : 25.629638844112286
FV at Mutated Child #2 at Generation # 24 : 0.44697995698772086
--> Family: # 66
FV at Mutated Child #1 at Generation # 24 : 0.7594261954939803
FV at Mutated Child #2 at Generation # 24 : 47.96759263663285
--> Family: # 67
FV at Mutated Child #1 at Generation # 24 : 29.62354442467935
FV at Mutated Child #2 at Generation # 24 : 1.8345623210902269
--> Family: # 68
FV at Mutated Child #1 at Generation # 24 : 0.42159629994706377
FV at Mutated Child #2 at Generation # 24 : 1.3325726580719972
--> Family: # 69
FV at Mutated Child #1 at Generation # 24 : 22.82838433873757
FV at Mutated Child #2 at Generation # 24 : 1.7975245669298623
--> Family: # 70
FV at Mutated Child #1 at Generation # 24 : 3.0466343097307207
FV at Mutated Child #2 at Generation # 24 : 4.515749522317326
--> Family: # 71
FV at Mutated Child #1 at Generation # 24 : 136.2180180340296
FV at Mutated Child #2 at Generation # 24 : 0.6834170680484983
--> Family: # 72
FV at Mutated Child #1 at Generation # 24 : 30.702078978836482
FV at Mutated Child #2 at Generation # 24 : 20.585903582874888
--> Family: # 73
FV at Mutated Child #1 at Generation # 24 : 0.559392202048351
FV at Mutated Child #2 at Generation # 24 : 1.1413043791370017
--> Family: # 74
FV at Mutated Child #1 at Generation # 24 : 127.31304853833997
FV at Mutated Child #2 at Generation # 24 : 45.81615947285782
--> Family: # 75
FV at Mutated Child #1 at Generation # 24 : 22.058870651363712
FV at Mutated Child #2 at Generation # 24 : 1.296721010930476
--> Family: # 76
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FV at Mutated Child #1 at Generation # 24 : 3.5204140934801145 FV at Mutated Child #2 at Generation # 24 : 8.768983070607696 --> Family: # 77 FV at Mutated Child #1 at Generation # 24 : 1.9454116527542382 FV at Mutated Child #2 at Generation # 24 : 0.5693967200762534 --> Family: # 78 FV at Mutated Child #1 at Generation # 24 : 2.194190662962002 FV at Mutated Child #2 at Generation # 24 : 30.01100463121136 --> Family: # 79 FV at Mutated Child #1 at Generation # 24 : 3.5541001504632055 FV at Mutated Child #2 at Generation # 24 : 124.11201069780472 --> Family: # 80 FV at Mutated Child #1 at Generation # 24 : 2.31352951042774 FV at Mutated Child #2 at Generation # 24 : 0.8633972691769342 --> **Generation:** # 25 --> Family: # 1 FV at Mutated Child #1 at Generation # 25 : 18.239306269338346 FV at Mutated Child #2 at Generation # 25 : 110.92385637266919 --> Family: # 2 FV at Mutated Child #1 at Generation # 25 : 10.329125208621658 FV at Mutated Child #2 at Generation # 25 : 48.422446811209255 --> Family: # 3 FV at Mutated Child #1 at Generation # 25 : 1.8304854665007788 FV at Mutated Child #2 at Generation # 25 : 5.649517412666885 --> Family: # 4 FV at Mutated Child #1 at Generation # 25 : 4.710437598077518 FV at Mutated Child #2 at Generation # 25 : 615.2013000603164 --> Family: # 5 FV at Mutated Child #1 at Generation # 25 : 38.938560847371484 FV at Mutated Child #2 at Generation # 25 : 1.0625292865901776 --> Family: # 6 FV at Mutated Child #1 at Generation # 25 : 0.8755873370262666 FV at Mutated Child #2 at Generation # 25 : 1.9552854503171466 --> Family: # 7 FV at Mutated Child #1 at Generation # 25 : 566.9601908947022 FV at Mutated Child #2 at Generation # 25 : 2.9286723653950544 --> Family: # 8 FV at Mutated Child #1 at Generation # 25 : 3.5408329596113846 FV at Mutated Child #2 at Generation # 25 : 1.4323690276841896 --> Family: # 9 FV at Mutated Child #1 at Generation # 25 : 35.127896706218124 FV at Mutated Child #2 at Generation # 25 : 7.924623721395532 --> Family: # 10 FV at Mutated Child #1 at Generation # 25 : 25.573950480286168 FV at Mutated Child #2 at Generation # 25 : 0.9616547254547136 --> Family: # 11

FV at Mutated Child #1 at Generation # 25 : 5.765491449882231 FV at Mutated Child #2 at Generation # 25 : 27.77682134387404 --> Family: # 12 FV at Mutated Child #1 at Generation # 25 : 624.9222175755091 FV at Mutated Child #2 at Generation # 25 : 4.773580309553805 --> Family: # 13 FV at Mutated Child #1 at Generation # 25 : 12.783167455581829 FV at Mutated Child #2 at Generation # 25 : 2486.3218965611172 --> Family: # 14 FV at Mutated Child #1 at Generation # 25 : 2.6089519197011306 FV at Mutated Child #2 at Generation # 25 : 3.145922967835979 --> Family: # 15 FV at Mutated Child #1 at Generation # 25 : 4.830359618085769 FV at Mutated Child #2 at Generation # 25 : 2.8902675078196536 --> Family: # 16 FV at Mutated Child #1 at Generation # 25 : 1.1981865769687472 FV at Mutated Child #2 at Generation # 25 : 10.335592295290423 --> Family: # 17 FV at Mutated Child #1 at Generation # 25 : 139.09582382412322 FV at Mutated Child #2 at Generation # 25 : 11.345620988659904 --> Family: # 18 FV at Mutated Child #1 at Generation # 25 : 2.40307987308345 FV at Mutated Child #2 at Generation # 25 : 16.43003963393321 --> Family: # 19 FV at Mutated Child #1 at Generation # 25 : 10.154453316891985 FV at Mutated Child #2 at Generation # 25 : 1.2241120920750694 --> Family: # 20 FV at Mutated Child #1 at Generation # 25 : 30.996476043250684 FV at Mutated Child #2 at Generation # 25 : 4.498458721281584 --> Family: # 21 FV at Mutated Child #1 at Generation # 25 : 150.34139870082853 FV at Mutated Child #2 at Generation # 25 : 2.287245626637492 --> Family: # 22 FV at Mutated Child #1 at Generation # 25 : 1.1227980618365145 FV at Mutated Child #2 at Generation # 25 : 39.392995136617934 --> Family: # 23 FV at Mutated Child #1 at Generation # 25 : 638.9006280338826 FV at Mutated Child #2 at Generation # 25 : 11.499826284784108 --> Family: # 24 FV at Mutated Child #1 at Generation # 25 : 37.1205334891355 FV at Mutated Child #2 at Generation # 25 : 6.984293087993005 --> Family: # 25 FV at Mutated Child #1 at Generation # 25 : 1.0344612215707125

FV at Mutated Child #2 at Generation # 25 : 10.860051952403783 --> Family: # 26

FV at Mutated Child #1 at Generation # 25 : 3.9969347248037614

FV at Mutated Child #2 at Generation # 25 : 1.2001593049020203 --> Family: # 27 FV at Mutated Child #1 at Generation # 25 : 30.728688544904813 FV at Mutated Child #2 at Generation # 25 : 3.9645310330030274 --> Family: # 28 FV at Mutated Child #1 at Generation # 25 : 131.05960911384454 FV at Mutated Child #2 at Generation # 25 : 1.703648556493767 --> Family: # 29 FV at Mutated Child #1 at Generation # 25 : 732.3590486616175 FV at Mutated Child #2 at Generation # 25 : 6.319565862277368 --> Family: # 30 FV at Mutated Child #1 at Generation # 25 : 8.579259704974273 FV at Mutated Child #2 at Generation # 25 : 9.219247334494707 --> Family: # 31 FV at Mutated Child #1 at Generation # 25 : 13.905277250953253 FV at Mutated Child #2 at Generation # 25 : 1.1438391992573105 --> Family: # 32 FV at Mutated Child #1 at Generation # 25 : 110.22248399055653 FV at Mutated Child #2 at Generation # 25 : 491.3521271514218 --> Family: # 33 FV at Mutated Child #1 at Generation # 25 : 4.947312718994943 FV at Mutated Child #2 at Generation # 25 : 2.8099370951911404 --> Family: # 34 FV at Mutated Child #1 at Generation # 25 : 173.9336522949842 FV at Mutated Child #2 at Generation # 25 : 5.455662242961363 --> Family: # 35 FV at Mutated Child #1 at Generation # 25 : 411.2188951812081 FV at Mutated Child #2 at Generation # 25 : 7.214727247739217 --> Family: # 36 FV at Mutated Child #1 at Generation # 25 : 15.984849700970932 FV at Mutated Child #2 at Generation # 25 : 16.022431723624948 --> Family: # 37 FV at Mutated Child #1 at Generation # 25 : 20.808261942892717 FV at Mutated Child #2 at Generation # 25 : 7.42602206893293 --> Family: # 38 FV at Mutated Child #1 at Generation # 25 : 26.63082405505157 FV at Mutated Child #2 at Generation # 25 : 34.512471164550256 --> Family: # 39 FV at Mutated Child #1 at Generation # 25 : 20.499583568789944 FV at Mutated Child #2 at Generation # 25 : 39.600837759761426 --> Family: # 40 FV at Mutated Child #1 at Generation # 25 : 0.9933285965277219 FV at Mutated Child #2 at Generation # 25 : 28.1317563918414 --> Family: # 41 FV at Mutated Child #1 at Generation # 25 : 8.402019458845128 FV at Mutated Child #2 at Generation # 25 : 160.56770150317922

--> Family: # 42

FV at Mutated Child #1 at Generation # 25 : 9.805959726590059 FV at Mutated Child #2 at Generation # 25 : 46.17467740918609 --> Family: # 43

FV at Mutated Child #1 at Generation # 25 : 8.601718819408694 FV at Mutated Child #2 at Generation # 25 : 45.00006098944111 --> Family: # 44

FV at Mutated Child #1 at Generation # 25 : 0.8102001960093459 FV at Mutated Child #2 at Generation # 25 : 175.94761782357668

--> Family: # 45

FV at Mutated Child #1 at Generation # 25 : 6.331134344527187 FV at Mutated Child #2 at Generation # 25 : 19.426014222128106 --> Family: # 46

FV at Mutated Child #1 at Generation # 25 : 11.140228848624893 FV at Mutated Child #2 at Generation # 25 : 607.2972670594282 --> Family: # 47

FV at Mutated Child #1 at Generation # 25 : 4.778918858164254 FV at Mutated Child #2 at Generation # 25 : 5.6968030045781095 --> Family: # 48

FV at Mutated Child #1 at Generation # 25 : 50.56897264451251 FV at Mutated Child #2 at Generation # 25 : 1.0699411742930152 --> Family: # 49

FV at Mutated Child #1 at Generation # 25 : 627.8600244531589 FV at Mutated Child #2 at Generation # 25 : 126.6423407097961 --> Family: # 50

FV at Mutated Child #1 at Generation # 25 : 4.010311264442892 FV at Mutated Child #2 at Generation # 25 : 36.16732238574953 --> Family: # 51

FV at Mutated Child #1 at Generation # 25 : 4.010311264442892 FV at Mutated Child #2 at Generation # 25 : 13.47397572264072 --> Family: # 52

FV at Mutated Child #1 at Generation # 25 : 10.703086311147269 FV at Mutated Child #2 at Generation # 25 : 57.84782147014976 --> Family: # 53

FV at Mutated Child #1 at Generation # 25 : 2.765129397350698 FV at Mutated Child #2 at Generation # 25 : 39.732798952482135 --> Family: # 54

FV at Mutated Child #1 at Generation # 25 : 26.07335087989143 FV at Mutated Child #2 at Generation # 25 : 0.7911540479563157 --> Family: # 55

FV at Mutated Child #1 at Generation # 25 : 6.2328907065243815 FV at Mutated Child #2 at Generation # 25 : 4.090988077442892 --> Family: # 56

FV at Mutated Child #1 at Generation # 25 : 9.626669097633952 FV at Mutated Child #2 at Generation # 25 : 7.2204555603836456 --> Family: # 57

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FV at Mutated Child #1 at Generation # 25 : 8.937735438194677
FV at Mutated Child #2 at Generation # 25 : 2.4139160508769795
--> Family: # 58
FV at Mutated Child #1 at Generation # 25 : 1.9552854503171466
FV at Mutated Child #2 at Generation # 25 : 4.623962840280331
--> Family: # 59
FV at Mutated Child #1 at Generation # 25 : 3.9334836904111543
FV at Mutated Child #2 at Generation # 25 : 15.590233167667185
--> Family: # 60
FV at Mutated Child #1 at Generation # 25 : 15.589983438353125
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FV at Mutated Child #2 at Generation # 25 : 3.7869508813676065
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FV at Mutated Child #2 at Generation # 25 : 47.85041042158239
--> Family: # 64
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FV at Mutated Child #2 at Generation # 25 : 20.876357200251594
--> Family: # 65
FV at Mutated Child #1 at Generation # 25 : 27.24738430449356
FV at Mutated Child #2 at Generation # 25 : 11.277164229515902
--> Family: # 66
FV at Mutated Child #1 at Generation # 25 : 3.5866476770977647
FV at Mutated Child #2 at Generation # 25 : 20.028951303807137
--> Family: # 67
FV at Mutated Child #1 at Generation # 25 : 9.945273403953898
FV at Mutated Child #2 at Generation # 25 : 139.5308014761473
--> Family: # 68
FV at Mutated Child #1 at Generation # 25 : 84.0772208137633
FV at Mutated Child #2 at Generation # 25 : 1.205592197604036
--> Family: # 69
FV at Mutated Child #1 at Generation # 25 : 2.9658338290148842
FV at Mutated Child #2 at Generation # 25 : 9.158505848115654
--> Family: # 70
FV at Mutated Child #1 at Generation # 25 : 0.8653813053859557
FV at Mutated Child #2 at Generation # 25 : 2.958785522303927
--> Family: # 71
FV at Mutated Child #1 at Generation # 25 : 174.14500351121922
FV at Mutated Child #2 at Generation # 25 : 4.194827557914786
--> Family: # 72
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FV at Mutated Child #1 at Generation # 25 : 2.3074091459583936 FV at Mutated Child #2 at Generation # 25 : 590.7118045636981 --> Family: # 73 FV at Mutated Child #1 at Generation # 25 : 4.384209976254881 FV at Mutated Child #2 at Generation # 25 : 679.0555923927895 --> Family: # 74 FV at Mutated Child #1 at Generation # 25 : 41.62229557810401 FV at Mutated Child #2 at Generation # 25 : 57.9560347954877 --> Family: # 75 FV at Mutated Child #1 at Generation # 25 : 16.68987969837994 FV at Mutated Child #2 at Generation # 25 : 7.495147596391438 --> Family: # 76 FV at Mutated Child #1 at Generation # 25 : 26.597686959146014 FV at Mutated Child #2 at Generation # 25 : 8.893131195660029 --> Family: # 77 FV at Mutated Child #1 at Generation # 25 : 11.878703942953276 FV at Mutated Child #2 at Generation # 25 : 1.0808534598479997 --> Family: # 78 FV at Mutated Child #1 at Generation # 25 : 168.6669580901757 FV at Mutated Child #2 at Generation # 25 : 3.2611122951739815 --> Family: # 79 FV at Mutated Child #1 at Generation # 25 : 593.4878400347476 FV at Mutated Child #2 at Generation # 25 : 2.952807467842813 --> Family: # 80 FV at Mutated Child #1 at Generation # 25 : 11.647391147971108 FV at Mutated Child #2 at Generation # 25 : 40.10736578614634 --> Generation: # 26 --> Family: # 1 FV at Mutated Child #1 at Generation # 26 : 8.812355082015323 FV at Mutated Child #2 at Generation # 26 : 2.595979073710797 --> Family: # 2 FV at Mutated Child #1 at Generation # 26 : 80.11767029501287 FV at Mutated Child #2 at Generation # 26 : 140.5380246935332 --> Family: # 3 FV at Mutated Child #1 at Generation # 26 : 7.42602206893293 FV at Mutated Child #2 at Generation # 26 : 0.51855940142504 --> Family: # 4 FV at Mutated Child #1 at Generation # 26 : 461.719648452638 FV at Mutated Child #2 at Generation # 26 : 1.3632285284866974 --> Family: # 5 FV at Mutated Child #1 at Generation # 26 : 23.566422167731304 FV at Mutated Child #2 at Generation # 26 : 7.994409373229841 --> Family: # 6 FV at Mutated Child #1 at Generation # 26 : 0.5828578996660362 FV at Mutated Child #2 at Generation # 26 : 0.7031097936416186 --> Family: # 7

FV at Mutated Child #1 at Generation # 26 : 1.2924325088168518 FV at Mutated Child #2 at Generation # 26 : 0.55208216215118 --> Family: # 8 FV at Mutated Child #1 at Generation # 26 : 3.2078006982274414 FV at Mutated Child #2 at Generation # 26 : 25.22563752491492 --> Family: # 9 FV at Mutated Child #1 at Generation # 26 : 33.320552731442675 FV at Mutated Child #2 at Generation # 26 : 609.9131912783168 --> Family: # 10 FV at Mutated Child #1 at Generation # 26 : 3.4273330171071823 FV at Mutated Child #2 at Generation # 26 : 29.722490739196193 --> Family: # 11 FV at Mutated Child #1 at Generation # 26 : 2.796386341622113 FV at Mutated Child #2 at Generation # 26 : 0.883846422773898 --> Family: # 12 FV at Mutated Child #1 at Generation # 26 : 120.06625438153532 FV at Mutated Child #2 at Generation # 26 : 123.76594115690165 --> Family: # 13 FV at Mutated Child #1 at Generation # 26 : 5.229420411896684 FV at Mutated Child #2 at Generation # 26 : 5.229420411896684 --> Family: # 14 FV at Mutated Child #1 at Generation # 26 : 5.966592526139418 FV at Mutated Child #2 at Generation # 26 : 0.746244757120598 --> Family: # 15 FV at Mutated Child #1 at Generation # 26 : 34.23680627812101 FV at Mutated Child #2 at Generation # 26 : 558.0321799789452 --> Family: # 16 FV at Mutated Child #1 at Generation # 26 : 3.0668963123298734 FV at Mutated Child #2 at Generation # 26 : 121.88504956240364 --> Family: # 17 FV at Mutated Child #1 at Generation # 26 : 33.70644544464015 FV at Mutated Child #2 at Generation # 26 : 2.064252970244006 --> Family: # 18 FV at Mutated Child #1 at Generation # 26 : 3.9304165726772413 FV at Mutated Child #2 at Generation # 26 : 24.03104192826535 --> Family: # 19 FV at Mutated Child #1 at Generation # 26 : 23.138539730562986 FV at Mutated Child #2 at Generation # 26 : 2.257364235949481 --> Family: # 20 FV at Mutated Child #1 at Generation # 26 : 65.7597437306135 FV at Mutated Child #2 at Generation # 26 : 2.2617231954073267 --> Family: # 21 FV at Mutated Child #1 at Generation # 26 : 0.7058970904490156 FV at Mutated Child #2 at Generation # 26 : 10.293575295728981

FV at Mutated Child #1 at Generation # 26 : 3.2482756820907883

--> Family: # 22

FV at Mutated Child #2 at Generation # 26 : 5.007214202509856 --> Family: # 23 FV at Mutated Child #1 at Generation # 26 : 0.27154939619124246 FV at Mutated Child #2 at Generation # 26 : 4.337133364581613 --> Family: # 24 FV at Mutated Child #1 at Generation # 26 : 1.526992853057099 FV at Mutated Child #2 at Generation # 26 : 36.94499245653863 --> Family: # 25 FV at Mutated Child #1 at Generation # 26 : 0.6890320888214049 FV at Mutated Child #2 at Generation # 26 : 12.912932780323537 --> Family: # 26 FV at Mutated Child #1 at Generation # 26 : 596.1305547492984 FV at Mutated Child #2 at Generation # 26 : 137.95067752544423 --> Family: # 27 FV at Mutated Child #1 at Generation # 26 : 1.5759875922838376 FV at Mutated Child #2 at Generation # 26 : 136.50766696708556 --> Family: # 28 FV at Mutated Child #1 at Generation # 26 : 2226.279971439562 FV at Mutated Child #2 at Generation # 26 : 1.1197992912224604 --> Family: # 29 FV at Mutated Child #1 at Generation # 26 : 143.75869860055712 FV at Mutated Child #2 at Generation # 26 : 133.3400014284695 --> Family: # 30 FV at Mutated Child #1 at Generation # 26 : 489.38031440801996 FV at Mutated Child #2 at Generation # 26 : 8.555341344814648 --> Family: # 31 FV at Mutated Child #1 at Generation # 26 : 1.1900367654239683 FV at Mutated Child #2 at Generation # 26 : 0.6806900548506302 --> Family: # 32 FV at Mutated Child #1 at Generation # 26 : 12.145254413688486 FV at Mutated Child #2 at Generation # 26 : 0.6834170680484983 --> Family: # 33 FV at Mutated Child #1 at Generation # 26 : 1.4543839499171984 FV at Mutated Child #2 at Generation # 26 : 137.95067752544423 --> Family: # 34 FV at Mutated Child #1 at Generation # 26 : 16.833996443855423 FV at Mutated Child #2 at Generation # 26 : 2145.317554335653 --> Family: # 35 FV at Mutated Child #1 at Generation # 26 : 9.00702410137361 FV at Mutated Child #2 at Generation # 26 : 38.6210337921527 --> Family: # 36 FV at Mutated Child #1 at Generation # 26 : 0.7095553717530576 FV at Mutated Child #2 at Generation # 26 : 90.73431999215481 --> Family: # 37 FV at Mutated Child #1 at Generation # 26 : 2294.8794474971346

FV at Mutated Child #2 at Generation # 26 : 544.057926383878

--> Family: # 38

FV at Mutated Child #1 at Generation # 26 : 0.883846422773898 FV at Mutated Child #2 at Generation # 26 : 1.5792754689277653

--> Family: # 39

FV at Mutated Child #1 at Generation # 26 : 0.6778311140810477 FV at Mutated Child #2 at Generation # 26 : 1.421923634406363

--> Family: # 40

FV at Mutated Child #1 at Generation # 26 : 137.27818496520848 FV at Mutated Child #2 at Generation # 26 : 82.11733878744005 --> Family: # 41

FV at Mutated Child #1 at Generation # 26 : 32.89224189912682 FV at Mutated Child #2 at Generation # 26 : 24.69886834761766 --> Family: # 42

FV at Mutated Child #1 at Generation # 26 : 114.70332059977976 FV at Mutated Child #2 at Generation # 26 : 2.008934369142552

--> Family: # 43

FV at Mutated Child #1 at Generation # 26 : 0.8223146247243307 FV at Mutated Child #2 at Generation # 26 : 22.069495235891793 --> Family: # 44

FV at Mutated Child #1 at Generation # 26 : 5.686106285721597 FV at Mutated Child #2 at Generation # 26 : 21.46776988377414 --> Family: # 45

FV at Mutated Child #1 at Generation # 26 : 2.726769913547325 FV at Mutated Child #2 at Generation # 26 : 107.28500385249396

--> Family: # 46

FV at Mutated Child #1 at Generation # 26 : 0.7028521154388659 FV at Mutated Child #2 at Generation # 26 : 22.738203360724068 --> Family: # 47

FV at Mutated Child #1 at Generation # 26 : 16.108279164253865 FV at Mutated Child #2 at Generation # 26 : 0.7557663735969495 --> Family: # 48

FV at Mutated Child #1 at Generation # 26 : 10.415784027470812 FV at Mutated Child #2 at Generation # 26 : 9.615769551924345 --> Family: # 49

FV at Mutated Child #1 at Generation # 26 : 4.137704800658734 FV at Mutated Child #2 at Generation # 26 : 0.7533549561039173 --> Family: # 50

FV at Mutated Child #1 at Generation # 26 : 21.697769624916283 FV at Mutated Child #2 at Generation # 26 : 4.598104842027874 --> Family: # 51

FV at Mutated Child #1 at Generation # 26 : 0.7595579550359332 FV at Mutated Child #2 at Generation # 26 : 10.258451865642089 --> Family: # 52

FV at Mutated Child #1 at Generation # 26 : 6.966063021495704 FV at Mutated Child #2 at Generation # 26 : 9.431627795628183 --> Family: # 53

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FV at Mutated Child #1 at Generation # 26 : 7.632552531854131
FV at Mutated Child #2 at Generation # 26 : 527.3551631176454
--> Family: # 54
FV at Mutated Child #1 at Generation # 26 : 0.6313940195185124
FV at Mutated Child #2 at Generation # 26 : 0.8958074228101836
--> Family: # 55
FV at Mutated Child #1 at Generation # 26 : 19.923004930836324
FV at Mutated Child #2 at Generation # 26 : 1.7990022246755917
--> Family: # 56
FV at Mutated Child #1 at Generation # 26 : 4.7827927163964015
FV at Mutated Child #2 at Generation # 26 : 0.30049255814934683
--> Family: # 57
FV at Mutated Child #1 at Generation # 26 : 99.05712960867251
FV at Mutated Child #2 at Generation # 26 : 540.3180066705992
--> Family: # 58
FV at Mutated Child #1 at Generation # 26 : 23.160236261381794
FV at Mutated Child #2 at Generation # 26 : 1.5692880197337105
--> Family: # 59
FV at Mutated Child #1 at Generation # 26 : 547.3510034443118
FV at Mutated Child #2 at Generation # 26 : 2.305039581386701
--> Family: # 60
FV at Mutated Child #1 at Generation # 26 : 39.15735702670705
FV at Mutated Child #2 at Generation # 26 : 4.087171784494257
--> Family: # 61
FV at Mutated Child #1 at Generation # 26 : 28.977952103455458
FV at Mutated Child #2 at Generation # 26 : 2406.0897691102987
--> Family: # 62
FV at Mutated Child #1 at Generation # 26 : 106.16775945553604
FV at Mutated Child #2 at Generation # 26 : 0.5124902822378308
--> Family: # 63
FV at Mutated Child #1 at Generation # 26 : 10.18908504113588
FV at Mutated Child #2 at Generation # 26 : 346.32006990712466
--> Family: # 64
FV at Mutated Child #1 at Generation # 26 : 2.279098375379603
FV at Mutated Child #2 at Generation # 26 : 1.944127987230623
--> Family: # 65
FV at Mutated Child #1 at Generation # 26 : 2.4381067207733973
FV at Mutated Child #2 at Generation # 26 : 2.1940152381438986
--> Family: # 66
FV at Mutated Child #1 at Generation # 26 : 0.8723799238832174
FV at Mutated Child #2 at Generation # 26 : 13.50336778779401
--> Family: # 67
FV at Mutated Child #1 at Generation # 26 : 0.9735690729166235
FV at Mutated Child #2 at Generation # 26 : 3.072253009699164
--> Family: # 68
```

FV at Mutated Child #1 at Generation # 26 : 31.38220669366674 FV at Mutated Child #2 at Generation # 26 : 117.53005069422089 --> Family: # 69 FV at Mutated Child #1 at Generation # 26 : 0.8102001960093459 FV at Mutated Child #2 at Generation # 26 : 83.7876769248404 --> Family: # 70 FV at Mutated Child #1 at Generation # 26 : 6.545551091813242 FV at Mutated Child #2 at Generation # 26 : 1.7663182495507497 --> Family: # 71 FV at Mutated Child #1 at Generation # 26 : 567.1334072405692 FV at Mutated Child #2 at Generation # 26 : 602.4957750454396 --> Family: # 72 FV at Mutated Child #1 at Generation # 26 : 6.913497437226529 FV at Mutated Child #2 at Generation # 26 : 1.516148887562414 --> Family: # 73 FV at Mutated Child #1 at Generation # 26 : 134.83281038120046 FV at Mutated Child #2 at Generation # 26 : 0.8321445986664916 --> Family: # 74 FV at Mutated Child #1 at Generation # 26 : 5.240873383566677 FV at Mutated Child #2 at Generation # 26 : 2.0919036614164064 --> Family: # 75 FV at Mutated Child #1 at Generation # 26 : 1.7428743083345064 FV at Mutated Child #2 at Generation # 26 : 0.7654741750862769 --> Family: # 76 FV at Mutated Child #1 at Generation # 26 : 2337.289318554347 FV at Mutated Child #2 at Generation # 26 : 1.7982449686468567 --> Family: # 77 FV at Mutated Child #1 at Generation # 26 : 1.8098482409928116 FV at Mutated Child #2 at Generation # 26 : 2.724420466810261 --> Family: # 78 FV at Mutated Child #1 at Generation # 26 : 4.498382686006943 FV at Mutated Child #2 at Generation # 26 : 8.768983070607696 --> Family: # 79 FV at Mutated Child #1 at Generation # 26 : 31.994368808981736 FV at Mutated Child #2 at Generation # 26 : 9.776856296706189 --> Family: # 80 FV at Mutated Child #1 at Generation # 26 : 81.17833013843604 FV at Mutated Child #2 at Generation # 26 : 1.632490475432665 --> Generation: # 27 --> Family: # 1 FV at Mutated Child #1 at Generation # 27 : 25.857790892503775 FV at Mutated Child #2 at Generation # 27 : 2.3642249587037707 --> Family: # 2 FV at Mutated Child #1 at Generation # 27 : 600.9692392573049 FV at Mutated Child #2 at Generation # 27 : 533.15058021172

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--> Family: # 3

FV at Mutated Child #1 at Generation # 27 : 131.38813897713314 FV at Mutated Child #2 at Generation # 27 : 1.9654519732572542 --> Family: # 4 FV at Mutated Child #1 at Generation # 27 : 2455.4211890043075 FV at Mutated Child #2 at Generation # 27 : 605.5926696118893 --> Family: # 5 FV at Mutated Child #1 at Generation # 27 : 11.280027122935495 FV at Mutated Child #2 at Generation # 27 : 9.931187894885081 --> Family: # 6 FV at Mutated Child #1 at Generation # 27 : 648.8540181753216 FV at Mutated Child #2 at Generation # 27 : 0.6959268529890142 --> Family: # 7 FV at Mutated Child #1 at Generation # 27 : 1.7650326041635744 FV at Mutated Child #2 at Generation # 27 : 4.048214295690719 --> Family: # 8 FV at Mutated Child #1 at Generation # 27 : 11.013509449977997 FV at Mutated Child #2 at Generation # 27 : 1.870020449711453 --> Family: # 9 FV at Mutated Child #1 at Generation # 27 : 150.71294858675938 FV at Mutated Child #2 at Generation # 27 : 13.933049825940799 --> Family: # 10 FV at Mutated Child #1 at Generation # 27 : 573.8445456231561 FV at Mutated Child #2 at Generation # 27 : 1.1429453625334092 --> Family: # 11 FV at Mutated Child #1 at Generation # 27 : 1.7077476780323426 FV at Mutated Child #2 at Generation # 27 : 11.599133467843556 --> Family: # 12 FV at Mutated Child #1 at Generation # 27 : 611.7092721630518 FV at Mutated Child #2 at Generation # 27 : 4.281200382886996 --> Family: # 13 FV at Mutated Child #1 at Generation # 27 : 2594.3591148664664 FV at Mutated Child #2 at Generation # 27 : 104.82434437907574 --> Family: # 14 FV at Mutated Child #1 at Generation # 27 : 26.149104608023883 FV at Mutated Child #2 at Generation # 27 : 187.1104262451253 --> Family: # 15 FV at Mutated Child #1 at Generation # 27 : 1.896900215859689 FV at Mutated Child #2 at Generation # 27 : 2.3752979099316756 --> Family: # 16 FV at Mutated Child #1 at Generation # 27 : 35.989665567295674 FV at Mutated Child #2 at Generation # 27 : 47.35944084483942 --> Family: # 17 FV at Mutated Child #1 at Generation # 27 : 41.57185038980069 FV at Mutated Child #2 at Generation # 27 : 624.5571962412357 --> Family: # 18

FV at Mutated Child #1 at Generation # 27 : 21.13019504985204

FV at Mutated Child #2 at Generation # 27 : 40.62036579906437 --> Family: # 19 FV at Mutated Child #1 at Generation # 27 : 8.61359119926878 FV at Mutated Child #2 at Generation # 27 : 20.300442039663416 --> Family: # 20 FV at Mutated Child #1 at Generation # 27 : 37.98769780300906 FV at Mutated Child #2 at Generation # 27 : 14.248672783776586 --> Family: # 21 FV at Mutated Child #1 at Generation # 27 : 139.47024828468093 FV at Mutated Child #2 at Generation # 27 : 153.04284037365224 --> Family: # 22 FV at Mutated Child #1 at Generation # 27 : 8.17058194987817 FV at Mutated Child #2 at Generation # 27 : 25.657929233489288 --> Family: # 23 FV at Mutated Child #1 at Generation # 27 : 6.528894339847655 FV at Mutated Child #2 at Generation # 27 : 1.760770862445869 --> Family: # 24 FV at Mutated Child #1 at Generation # 27 : 396.73555025451446 FV at Mutated Child #2 at Generation # 27 : 567.9036540586692 --> Family: # 25 FV at Mutated Child #1 at Generation # 27 : 3.7291477216776743 FV at Mutated Child #2 at Generation # 27 : 0.8903067310049084 --> Family: # 26 FV at Mutated Child #1 at Generation # 27 : 135.4831516414054 FV at Mutated Child #2 at Generation # 27 : 21.418273961428707 --> Family: # 27 FV at Mutated Child #1 at Generation # 27 : 3.31150757581055 FV at Mutated Child #2 at Generation # 27 : 171.58446500574055 --> Family: # 28 FV at Mutated Child #1 at Generation # 27 : 8.13635713401793 FV at Mutated Child #2 at Generation # 27 : 54.75080536311858 --> Family: # 29 FV at Mutated Child #1 at Generation # 27 : 34.216927483595754 FV at Mutated Child #2 at Generation # 27 : 127.55961348543327 --> Family: # 30 FV at Mutated Child #1 at Generation # 27 : 1.7880190102721207 FV at Mutated Child #2 at Generation # 27 : 94.24177350544005 --> Family: # 31 FV at Mutated Child #1 at Generation # 27 : 3.5020657084963465 FV at Mutated Child #2 at Generation # 27 : 19.758368847419277 --> Family: # 32 FV at Mutated Child #1 at Generation # 27 : 4.783343624846298 FV at Mutated Child #2 at Generation # 27 : 0.727840154900857 --> Family: # 33 FV at Mutated Child #1 at Generation # 27 : 43.34059149855309

FV at Mutated Child #2 at Generation # 27 : 580.4911588688012

Ex_1_2_3 --> Family: # 34 FV at Mutated Child #1 at Generation # 27 : 3.8866613659441196 FV at Mutated Child #2 at Generation # 27 : 129.77645352963503 --> Family: # 35 FV at Mutated Child #1 at Generation # 27 : 601.2150363138672 FV at Mutated Child #2 at Generation # 27 : 1.5266512974022657 --> Family: # 36 FV at Mutated Child #1 at Generation # 27 : 4.6875425813481275 FV at Mutated Child #2 at Generation # 27 : 152.91694918004242 --> Family: # 37 FV at Mutated Child #1 at Generation # 27 : 24.840810792189732 FV at Mutated Child #2 at Generation # 27 : 18.115931763777567 --> Family: # 38 FV at Mutated Child #1 at Generation # 27 : 9.874525273505958 FV at Mutated Child #2 at Generation # 27 : 0.7933333706084548 --> Family: # 39 FV at Mutated Child #1 at Generation # 27 : 2.9286723653950544 FV at Mutated Child #2 at Generation # 27 : 0.8907509094064434 --> Family: # 40 FV at Mutated Child #1 at Generation # 27 : 2285.8655257580135 FV at Mutated Child #2 at Generation # 27 : 5.631892878933945 --> Family: # 41 FV at Mutated Child #1 at Generation # 27 : 152.813791005593 FV at Mutated Child #2 at Generation # 27 : 7.40338655094113 --> Family: # 42 FV at Mutated Child #1 at Generation # 27 : 5.075310072408535 FV at Mutated Child #2 at Generation # 27 : 10.934930584611221 --> Family: # 43 FV at Mutated Child #1 at Generation # 27 : 1.3572228361775132 FV at Mutated Child #2 at Generation # 27 : 13.195624477792462 --> Family: # 44 FV at Mutated Child #1 at Generation # 27 : 1.5498281332200787 FV at Mutated Child #2 at Generation # 27 : 10.454840055034165 --> Family: # 45 FV at Mutated Child #1 at Generation # 27 : 4.973599761979639 FV at Mutated Child #2 at Generation # 27 : 1.5102773222872368 --> Family: # 46 FV at Mutated Child #1 at Generation # 27 : 110.55393257110758 FV at Mutated Child #2 at Generation # 27 : 1.0562591970436601 --> Family: # 47 FV at Mutated Child #1 at Generation # 27 : 4.867401535631369 FV at Mutated Child #2 at Generation # 27 : 1.8748738233996685 --> Family: # 48

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--> Family: # 49

FV at Mutated Child #1 at Generation # 27 : 161.60421883269112 FV at Mutated Child #2 at Generation # 27 : 6.725549416482633

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FV at Mutated Child #1 at Generation # 27 : 5.5402865101778165
FV at Mutated Child #2 at Generation # 27 : 37.359243404688925
--> Family: # 50
FV at Mutated Child #1 at Generation # 27 : 624.1821434699733
FV at Mutated Child #2 at Generation # 27 : 35.08893679994712
--> Family: # 51
FV at Mutated Child #1 at Generation # 27 : 27.93761681833793
FV at Mutated Child #2 at Generation # 27 : 11.139613667032425
--> Family: # 52
FV at Mutated Child #1 at Generation # 27 : 18.008542342539393
FV at Mutated Child #2 at Generation # 27 : 571.8361398287326
--> Family: # 53
FV at Mutated Child #1 at Generation # 27 : 3.206175955126914
FV at Mutated Child #2 at Generation # 27 : 1.2737080148828446
--> Family: # 54
FV at Mutated Child #1 at Generation # 27 : 25.65070446832155
FV at Mutated Child #2 at Generation # 27 : 0.7933333706084548
--> Family: # 55
FV at Mutated Child #1 at Generation # 27 : 11.473829729160848
FV at Mutated Child #2 at Generation # 27 : 28.80474222851342
--> Family: # 56
FV at Mutated Child #1 at Generation # 27 : 1.2117725398562773
FV at Mutated Child #2 at Generation # 27 : 138.58237398594304
--> Family: # 57
FV at Mutated Child #1 at Generation # 27 : 7.915338386407032
FV at Mutated Child #2 at Generation # 27 : 2.464950817202385
--> Family: # 58
FV at Mutated Child #1 at Generation # 27 : 6.804295986408366
FV at Mutated Child #2 at Generation # 27 : 16.856647240205433
--> Family: # 59
FV at Mutated Child #1 at Generation # 27 : 0.9871035165749795
FV at Mutated Child #2 at Generation # 27 : 28.838116141527703
--> Family: # 60
FV at Mutated Child #1 at Generation # 27 : 2.159013043850609
FV at Mutated Child #2 at Generation # 27 : 1.5498281332200787
--> Family: # 61
FV at Mutated Child #1 at Generation # 27 : 36.512519874187745
FV at Mutated Child #2 at Generation # 27 : 3.508399017364496
--> Family: # 62
FV at Mutated Child #1 at Generation # 27 : 147.15888722770498
FV at Mutated Child #2 at Generation # 27 : 36.22082811925293
--> Family: # 63
FV at Mutated Child #1 at Generation # 27 : 16.860429797021272
FV at Mutated Child #2 at Generation # 27 : 18.591723985035344
--> Family: # 64
```

FV at Mutated Child #1 at Generation # 27 : 2.022747545070139 FV at Mutated Child #2 at Generation # 27 : 4.759956882733305 --> Family: # 65 FV at Mutated Child #1 at Generation # 27 : 154.62505328483135 FV at Mutated Child #2 at Generation # 27 : 3.8639841109898185 --> Family: # 66 FV at Mutated Child #1 at Generation # 27 : 7.4035207586367155 FV at Mutated Child #2 at Generation # 27 : 27.89507812931781 --> Family: # 67 FV at Mutated Child #1 at Generation # 27 : 31.64471205511258 FV at Mutated Child #2 at Generation # 27 : 157.27577407836569 --> Family: # 68 FV at Mutated Child #1 at Generation # 27 : 26.88568914288886 FV at Mutated Child #2 at Generation # 27 : 4.534494492804845 --> Family: # 69 FV at Mutated Child #1 at Generation # 27 : 2.702911621237099 FV at Mutated Child #2 at Generation # 27 : 10.259197568954184 --> Family: # 70 FV at Mutated Child #1 at Generation # 27 : 1.2427592285473283 FV at Mutated Child #2 at Generation # 27 : 35.718560301039936 --> Family: # 71 FV at Mutated Child #1 at Generation # 27 : 5.04510472016459 FV at Mutated Child #2 at Generation # 27 : 48.253495982866625 --> Family: # 72 FV at Mutated Child #1 at Generation # 27 : 5.5508948332438655 FV at Mutated Child #2 at Generation # 27 : 1.9045293358998054 --> Family: # 73 FV at Mutated Child #1 at Generation # 27 : 47.23935829989839 FV at Mutated Child #2 at Generation # 27 : 35.989665567295674 --> Family: # 74 FV at Mutated Child #1 at Generation # 27 : 594.0566424887669 FV at Mutated Child #2 at Generation # 27 : 161.77480261321668 --> Family: # 75 FV at Mutated Child #1 at Generation # 27 : 1.3674750970161176 FV at Mutated Child #2 at Generation # 27 : 0.7984172680130682 --> Family: # 76 FV at Mutated Child #1 at Generation # 27 : 26.05898562216213 FV at Mutated Child #2 at Generation # 27 : 3.0306527103076903 --> Family: # 77

FV at Mutated Child #1 at Generation # 27 : 11.582522354612541

FV at Mutated Child #2 at Generation # 27 : 36.26874657988426 --> Family: # 78

FV at Mutated Child #1 at Generation # 27 : 0.7911540479563157 FV at Mutated Child #2 at Generation # 27 : 119.84911735442535 --> Family: # 79

FV at Mutated Child #1 at Generation # 27 : 20.017144175857894

FV at Mutated Child #2 at Generation # 27 : 1.546736785913152 --> Family: # 80 FV at Mutated Child #1 at Generation # 27 : 7.471216697338108 FV at Mutated Child #2 at Generation # 27 : 40.62638010878551 --> Generation: # 28 --> Family: # 1 FV at Mutated Child #1 at Generation # 28 : 1.0576251683474687 FV at Mutated Child #2 at Generation # 28 : 12.048710833987224 --> Family: # 2 FV at Mutated Child #1 at Generation # 28 : 27.080877710028357 FV at Mutated Child #2 at Generation # 28 : 59.91668164902945 --> Family: # 3 FV at Mutated Child #1 at Generation # 28 : 512.7159798661031 FV at Mutated Child #2 at Generation # 28 : 87.91588895623114 --> Family: # 4 FV at Mutated Child #1 at Generation # 28 : 599.0864009732886 FV at Mutated Child #2 at Generation # 28 : 141.67840910696216 --> Family: # 5 FV at Mutated Child #1 at Generation # 28 : 0.4992767225160214 FV at Mutated Child #2 at Generation # 28 : 4.703185664316801 --> Family: # 6 FV at Mutated Child #1 at Generation # 28 : 0.8270987710936804 FV at Mutated Child #2 at Generation # 28 : 131.0113235101924 --> Family: # 7 FV at Mutated Child #1 at Generation # 28 : 1.188434769729612 FV at Mutated Child #2 at Generation # 28 : 24.459532963849806 --> Family: # 8 FV at Mutated Child #1 at Generation # 28 : 30.384856240956314 FV at Mutated Child #2 at Generation # 28 : 115.07998239501819 --> Family: # 9 FV at Mutated Child #1 at Generation # 28 : 2388.182746812406 FV at Mutated Child #2 at Generation # 28 : 2470.5730590920457 --> Family: # 10 FV at Mutated Child #1 at Generation # 28 : 90.38182317443815 FV at Mutated Child #2 at Generation # 28 : 86.68428012279071 --> Family: # 11 FV at Mutated Child #1 at Generation # 28 : 33.88166409226139 FV at Mutated Child #2 at Generation # 28 : 26.141121186187142 --> Family: # 12 FV at Mutated Child #1 at Generation # 28 : 0.6882218871209689 FV at Mutated Child #2 at Generation # 28 : 5.013627241980548 --> Family: # 13 FV at Mutated Child #1 at Generation # 28 : 94.63639478625632 FV at Mutated Child #2 at Generation # 28 : 6.51644188025522 --> Family: # 14

FV at Mutated Child #1 at Generation # 28 : 4.321428885929643

FV at Mutated Child #2 at Generation # 28 : 35.71089921511931 --> Family: # 15 FV at Mutated Child #1 at Generation # 28 : 113.7050119516397 FV at Mutated Child #2 at Generation # 28 : 602.5494613524319 --> Family: # 16 FV at Mutated Child #1 at Generation # 28 : 9.662211709186867 FV at Mutated Child #2 at Generation # 28 : 14.954490195079282 --> Family: # 17 FV at Mutated Child #1 at Generation # 28 : 33.449472443840975 FV at Mutated Child #2 at Generation # 28 : 3.5656575113219233 --> Family: # 18 FV at Mutated Child #1 at Generation # 28 : 551.3175437119336 FV at Mutated Child #2 at Generation # 28 : 15.087639445892098 --> Family: # 19 FV at Mutated Child #1 at Generation # 28 : 7.050941461736703 FV at Mutated Child #2 at Generation # 28 : 1.9981535096506668 --> Family: # 20 FV at Mutated Child #1 at Generation # 28 : 6.763165876922544 FV at Mutated Child #2 at Generation # 28 : 4.725857976115287 --> Family: # 21 FV at Mutated Child #1 at Generation # 28 : 23.76303833567492 FV at Mutated Child #2 at Generation # 28 : 1.3417948000729298 --> Family: # 22 FV at Mutated Child #1 at Generation # 28 : 2411.860461356965 FV at Mutated Child #2 at Generation # 28 : 8.487005248597082 --> Family: # 23 FV at Mutated Child #1 at Generation # 28 : 381.6009558852885 FV at Mutated Child #2 at Generation # 28 : 355.62258951013104 --> Family: # 24 FV at Mutated Child #1 at Generation # 28 : 27.455622372834405 FV at Mutated Child #2 at Generation # 28 : 2.257364235949481 --> Family: # 25 FV at Mutated Child #1 at Generation # 28: 4.857539318073576 FV at Mutated Child #2 at Generation # 28 : 1.533682670255931 --> Family: # 26 FV at Mutated Child #1 at Generation # 28 : 30.026556213788506 FV at Mutated Child #2 at Generation # 28 : 32.279803015429565 --> Family: # 27 FV at Mutated Child #1 at Generation # 28 : 0.9349016713930087 FV at Mutated Child #2 at Generation # 28 : 5.006053001137926 --> Family: # 28 FV at Mutated Child #1 at Generation # 28 : 2.1940152381438986 FV at Mutated Child #2 at Generation # 28 : 1.9492496883081158 --> Family: # 29 FV at Mutated Child #1 at Generation # 28 : 34.55371011073264 FV at Mutated Child #2 at Generation # 28 : 1.8262568038395322

--> Family: # 30

FV at Mutated Child #1 at Generation # 28 : 31.045225386932156 FV at Mutated Child #2 at Generation # 28 : 412.2765108950391 --> Family: # 31

FV at Mutated Child #1 at Generation # 28 : 69.08014608084557 FV at Mutated Child #2 at Generation # 28 : 622.1359000365152 --> Family: # 32

FV at Mutated Child #1 at Generation # 28 : 1.2316532002098965 FV at Mutated Child #2 at Generation # 28 : 26.902586718576856 --> Family: # 33

FV at Mutated Child #1 at Generation # 28 : 26.060100408743832 FV at Mutated Child #2 at Generation # 28 : 2.775803885665333 --> Family: # 34

FV at Mutated Child #1 at Generation # 28 : 2.2188707636753566 FV at Mutated Child #2 at Generation # 28 : 18.085926015595657 --> Family: # 35

FV at Mutated Child #1 at Generation # 28 : 473.6732273440788 FV at Mutated Child #2 at Generation # 28 : 18.160423932210612 --> Family: # 36

FV at Mutated Child #1 at Generation # 28 : 28.477077511268003 FV at Mutated Child #2 at Generation # 28 : 2.7125070598740164 --> Family: # 37

FV at Mutated Child #1 at Generation # 28 : 1608.5094275723711 FV at Mutated Child #2 at Generation # 28 : 1521.1464262133475 --> Family: # 38

FV at Mutated Child #1 at Generation # 28 : 1.963386542969522 FV at Mutated Child #2 at Generation # 28 : 0.9065620447662646

--> Family: # 39

FV at Mutated Child #1 at Generation # 28 : 0.7418229855638978 FV at Mutated Child #2 at Generation # 28 : 67.31278091573076 --> Family: # 40

FV at Mutated Child #1 at Generation # 28 : 1.5865245444560234 FV at Mutated Child #2 at Generation # 28 : 585.4541409754867 --> Family: # 41

FV at Mutated Child #1 at Generation # 28 : 13.472949626456652 FV at Mutated Child #2 at Generation # 28 : 5.557433522366015 --> Family: # 42

FV at Mutated Child #1 at Generation # 28 : 36.407638288329004 FV at Mutated Child #2 at Generation # 28 : 26.179053973954215 --> Family: # 43

FV at Mutated Child #1 at Generation # 28 : 0.6305254414849472 FV at Mutated Child #2 at Generation # 28 : 3.275254188181256 --> Family: # 44

FV at Mutated Child #1 at Generation # 28 : 0.9885081262507869 FV at Mutated Child #2 at Generation # 28 : 1.4406060069955506 --> Family: # 45

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FV at Mutated Child #1 at Generation # 28 : 1.0767076634338613
FV at Mutated Child #2 at Generation # 28 : 134.6395110904847
--> Family: # 46
FV at Mutated Child #1 at Generation # 28 : 8.512192241068096
FV at Mutated Child #2 at Generation # 28 : 1.0896541978402206
--> Family: # 47
FV at Mutated Child #1 at Generation # 28 : 0.6251383152148681
FV at Mutated Child #2 at Generation # 28 : 7.163603751383555
--> Family: # 48
FV at Mutated Child #1 at Generation # 28 : 1.498127074474716
FV at Mutated Child #2 at Generation # 28 : 0.7701651823814277
--> Family: # 49
FV at Mutated Child #1 at Generation # 28 : 0.9026149086503831
FV at Mutated Child #2 at Generation # 28 : 5.767459469024815
--> Family: # 50
FV at Mutated Child #1 at Generation # 28 : 26.35416700867865
FV at Mutated Child #2 at Generation # 28 : 1.2700035981224236
--> Family: # 51
FV at Mutated Child #1 at Generation # 28 : 0.8354380158025893
FV at Mutated Child #2 at Generation # 28 : 35.26796163905438
--> Family: # 52
FV at Mutated Child #1 at Generation # 28 : 7.7095482928773835
FV at Mutated Child #2 at Generation # 28 : 0.6935927610161832
--> Family: # 53
FV at Mutated Child #1 at Generation # 28 : 4.485911530790178
FV at Mutated Child #2 at Generation # 28 : 2.63701030222205
--> Family: # 54
FV at Mutated Child #1 at Generation # 28 : 1.2872860252337643
FV at Mutated Child #2 at Generation # 28 : 12.396794719543387
--> Family: # 55
FV at Mutated Child #1 at Generation # 28 : 141.0485846908372
FV at Mutated Child #2 at Generation # 28 : 1.502853221811277
--> Family: # 56
FV at Mutated Child #1 at Generation # 28 : 137.10480046231015
FV at Mutated Child #2 at Generation # 28 : 15.96559427302118
--> Family: # 57
FV at Mutated Child #1 at Generation # 28 : 5.557433522366015
FV at Mutated Child #2 at Generation # 28 : 0.701324590937346
--> Family: # 58
FV at Mutated Child #1 at Generation # 28 : 0.6822826950581372
FV at Mutated Child #2 at Generation # 28 : 1.3632285284866974
--> Family: # 59
FV at Mutated Child #1 at Generation # 28 : 0.8223146247243307
FV at Mutated Child #2 at Generation # 28 : 6.231053986867396
--> Family: # 60
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FV at Mutated Child #1 at Generation # 28 : 81.50142408447387 FV at Mutated Child #2 at Generation # 28 : 116.9678174567078 --> Family: # 61 FV at Mutated Child #1 at Generation # 28 : 9.999856143993043 FV at Mutated Child #2 at Generation # 28 : 2.775803885665333 --> Family: # 62 FV at Mutated Child #1 at Generation # 28 : 18.87273238931393 FV at Mutated Child #2 at Generation # 28 : 2382.7493568654536 --> Family: # 63 FV at Mutated Child #1 at Generation # 28 : 1.7532973788301969 FV at Mutated Child #2 at Generation # 28 : 30.422749574547566 --> Family: # 64 FV at Mutated Child #1 at Generation # 28 : 400.4426183928641 FV at Mutated Child #2 at Generation # 28 : 0.8036481237651418 --> Family: # 65 FV at Mutated Child #1 at Generation # 28 : 35.77120868412609 FV at Mutated Child #2 at Generation # 28 : 0.6368156788357998 --> Family: # 66 FV at Mutated Child #1 at Generation # 28 : 0.7125862460962187 FV at Mutated Child #2 at Generation # 28 : 28.977952103455458 --> Family: # 67 FV at Mutated Child #1 at Generation # 28 : 13.07486228309949 FV at Mutated Child #2 at Generation # 28 : 5.971808647720627 --> Family: # 68 FV at Mutated Child #1 at Generation # 28 : 35.855547886512056

FV at Mutated Child #2 at Generation # 28 : 1.3380690834268223 --> Family: # 69

FV at Mutated Child #1 at Generation # 28 : 568.082312900964 FV at Mutated Child #2 at Generation # 28 : 131.39879988190296 --> Family: # 70

FV at Mutated Child #1 at Generation # 28 : 144.90392725310178 FV at Mutated Child #2 at Generation # 28 : 28.342543515129147 --> Family: # 71

FV at Mutated Child #1 at Generation # 28 : 0.8097012057069883 FV at Mutated Child #2 at Generation # 28 : 2302.4716729269862 --> Family: # 72

FV at Mutated Child #1 at Generation # 28 : 5.611461010738234 FV at Mutated Child #2 at Generation # 28 : 1.7820704044140347 --> Family: # 73

FV at Mutated Child #1 at Generation # 28 : 0.7954628084876473 FV at Mutated Child #2 at Generation # 28 : 0.7882463446482828 --> Family: # 74

FV at Mutated Child #1 at Generation # 28 : 7.377677142835617 FV at Mutated Child #2 at Generation # 28 : 2305.530379135254 --> Family: # 75

FV at Mutated Child #1 at Generation # 28 : 0.6419558343484597

FV at Mutated Child #2 at Generation # 28 : 5.251725440705345 --> Family: # 76 FV at Mutated Child #1 at Generation # 28 : 146.1046948068491 FV at Mutated Child #2 at Generation # 28 : 0.619726385391685 --> Family: # 77 FV at Mutated Child #1 at Generation # 28 : 4.631733844798739 FV at Mutated Child #2 at Generation # 28 : 561.4711364532758 --> Family: # 78 FV at Mutated Child #1 at Generation # 28 : 2.257364235949481 FV at Mutated Child #2 at Generation # 28 : 6.1496867375126625 --> Family: # 79 FV at Mutated Child #1 at Generation # 28 : 91.78328531822312 FV at Mutated Child #2 at Generation # 28 : 0.8716088034648464 --> Family: # 80 FV at Mutated Child #1 at Generation # 28 : 35.70008970800884 FV at Mutated Child #2 at Generation # 28 : 0.883173702974953 --> Generation: # 29 --> Family: # 1 FV at Mutated Child #1 at Generation # 29 : 6.018985967869384 FV at Mutated Child #2 at Generation # 29 : 5.631892878933945 --> Family: # 2 FV at Mutated Child #1 at Generation # 29 : 52.132310385089156 FV at Mutated Child #2 at Generation # 29 : 156.71419654623335 --> Family: # 3 FV at Mutated Child #1 at Generation # 29 : 33.15927888600856 FV at Mutated Child #2 at Generation # 29 : 14.121096285680341 --> Family: # 4 FV at Mutated Child #1 at Generation # 29 : 112.64488627793655 FV at Mutated Child #2 at Generation # 29 : 163.9656641572365 --> Family: # 5 FV at Mutated Child #1 at Generation # 29 : 9.882417818121205 FV at Mutated Child #2 at Generation # 29 : 9.41660693151773 --> Family: # 6 FV at Mutated Child #1 at Generation # 29 : 0.6902462358906878 FV at Mutated Child #2 at Generation # 29 : 11.678277059133222 --> Family: # 7 FV at Mutated Child #1 at Generation # 29 : 27.261997417196174 FV at Mutated Child #2 at Generation # 29 : 5.186778085074402 --> Family: # 8 FV at Mutated Child #1 at Generation # 29 : 160.43603804299565 FV at Mutated Child #2 at Generation # 29 : 5.727136130839525 --> Family: # 9 FV at Mutated Child #1 at Generation # 29 : 32.44491402511625 FV at Mutated Child #2 at Generation # 29 : 29.576187206431367 --> Family: # 10

FV at Mutated Child #1 at Generation # 29 : 1.746542510171781

FV at Mutated Child #2 at Generation # 29 : 42.60579207569757 --> Family: # 11 FV at Mutated Child #1 at Generation # 29 : 0.8317537014216578 FV at Mutated Child #2 at Generation # 29 : 1.6906269385891162 --> Family: # 12 FV at Mutated Child #1 at Generation # 29 : 0.8907509094064434 FV at Mutated Child #2 at Generation # 29 : 1.6663563526656295 --> Family: # 13 FV at Mutated Child #1 at Generation # 29 : 1.2607241801339746 FV at Mutated Child #2 at Generation # 29 : 31.611965328762167 --> Family: # 14 FV at Mutated Child #1 at Generation # 29 : 5.864659485735258 FV at Mutated Child #2 at Generation # 29 : 12.562985995937101 --> Family: # 15 FV at Mutated Child #1 at Generation # 29 : 29.841015736194926 FV at Mutated Child #2 at Generation # 29 : 24.193394638025 --> Family: # 16 FV at Mutated Child #1 at Generation # 29 : 1.0679266501155982 FV at Mutated Child #2 at Generation # 29 : 131.483880324915 --> Family: # 17 FV at Mutated Child #1 at Generation # 29 : 154.84121286381975 FV at Mutated Child #2 at Generation # 29 : 2.62813778424536 --> Family: # 18 FV at Mutated Child #1 at Generation # 29 : 131.46806592345308 FV at Mutated Child #2 at Generation # 29 : 9.674819507109863 --> Family: # 19 FV at Mutated Child #1 at Generation # 29 : 7.523929985495563 FV at Mutated Child #2 at Generation # 29 : 6.256988831602626 --> Family: # 20 FV at Mutated Child #1 at Generation # 29 : 5.765491449882231 FV at Mutated Child #2 at Generation # 29 : 9.352546934186151 --> Family: # 21 FV at Mutated Child #1 at Generation # 29 : 33.04845564789586 FV at Mutated Child #2 at Generation # 29 : 1.721574559397817 --> Family: # 22 FV at Mutated Child #1 at Generation # 29 : 12.903137937530339 FV at Mutated Child #2 at Generation # 29 : 41.02662577449631 --> Family: # 23 FV at Mutated Child #1 at Generation # 29 : 22.49825699750855 FV at Mutated Child #2 at Generation # 29 : 34.11318061430872 --> Family: # 24 FV at Mutated Child #1 at Generation # 29 : 125.36295268685267 FV at Mutated Child #2 at Generation # 29 : 3.5327739128660487 --> Family: # 25 FV at Mutated Child #1 at Generation # 29 : 12.868475152975435 FV at Mutated Child #2 at Generation # 29 : 127.19098473597921

--> Family: # 26

FV at Mutated Child #1 at Generation # 29 : 1.488290331481053 FV at Mutated Child #2 at Generation # 29 : 463.43010251767805

--> Family: # 27

FV at Mutated Child #1 at Generation # 29 : 158.77389843039106 FV at Mutated Child #2 at Generation # 29 : 101.03673859760876

--> Family: # 28

FV at Mutated Child #1 at Generation # 29 : 35.21382922521703 FV at Mutated Child #2 at Generation # 29 : 598.8015479066544

--> Family: # 29

FV at Mutated Child #1 at Generation # 29 : 11.060565985571094 FV at Mutated Child #2 at Generation # 29 : 0.9616547254547136

--> Family: # 30

FV at Mutated Child #1 at Generation # 29 : 0.900956210594832 FV at Mutated Child #2 at Generation # 29 : 143.72087909540636 --> Family: # 31

FV at Mutated Child #1 at Generation # 29 : 36.358313433168135 FV at Mutated Child #2 at Generation # 29 : 0.7031872947688566 --> Family: # 32

FV at Mutated Child #1 at Generation # 29 : 376.1981614576736 FV at Mutated Child #2 at Generation # 29 : 36.06696915968579 --> Family: # 33

FV at Mutated Child #1 at Generation # 29 : 5.04115638598576 FV at Mutated Child #2 at Generation # 29 : 26.04881372391309

--> Family: # 34

FV at Mutated Child #1 at Generation # 29 : 1.0716780568544262 FV at Mutated Child #2 at Generation # 29 : 7.915338386407032 --> Family: # 35

FV at Mutated Child #1 at Generation # 29 : 0.9580837202572237 FV at Mutated Child #2 at Generation # 29 : 4.7544771570341355 --> Family: # 36

FV at Mutated Child #1 at Generation # 29 : 22.01169198311525 FV at Mutated Child #2 at Generation # 29 : 34.35248472251139

--> Family: # 37

FV at Mutated Child #1 at Generation # 29 : 7.586606815035554 FV at Mutated Child #2 at Generation # 29 : 0.8016177353105083

--> Family: # 38

FV at Mutated Child #1 at Generation # 29 : 9.916616806560555 FV at Mutated Child #2 at Generation # 29 : 49.254353658274766 --> Family: # 39

FV at Mutated Child #1 at Generation # 29 : 6.385126748380521 FV at Mutated Child #2 at Generation # 29 : 3.5020657084963465 --> Family: # 40

FV at Mutated Child #1 at Generation # 29 : 1.7557669888753176 FV at Mutated Child #2 at Generation # 29 : 132.20715327952732

--> Family: # 41

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FV at Mutated Child #1 at Generation # 29 : 167.35586706056634
FV at Mutated Child #2 at Generation # 29 : 1.2184107243229048
--> Family: # 42
FV at Mutated Child #1 at Generation # 29 : 4.24877967335212
FV at Mutated Child #2 at Generation # 29 : 1.721574559397817
--> Family: # 43
FV at Mutated Child #1 at Generation # 29 : 1.1429453625334092
FV at Mutated Child #2 at Generation # 29 : 4.912531300327124
--> Family: # 44
FV at Mutated Child #1 at Generation # 29 : 1.3465958524580963
FV at Mutated Child #2 at Generation # 29 : 9.604525969284138
--> Family: # 45
FV at Mutated Child #1 at Generation # 29 : 34.39772224064147
FV at Mutated Child #2 at Generation # 29 : 4.048214295690719
--> Family: # 46
FV at Mutated Child #1 at Generation # 29 : 3.6081882446629385
FV at Mutated Child #2 at Generation # 29 : 1.04554343282062
--> Family: # 47
FV at Mutated Child #1 at Generation # 29 : 1.595333170875872
FV at Mutated Child #2 at Generation # 29 : 14.597349421115073
--> Family: # 48
FV at Mutated Child #1 at Generation # 29 : 2.1989006676977128
FV at Mutated Child #2 at Generation # 29 : 503.44358222612016
--> Family: # 49
FV at Mutated Child #1 at Generation # 29 : 46.663973260035654
FV at Mutated Child #2 at Generation # 29 : 509.84498873955107
--> Family: # 50
FV at Mutated Child #1 at Generation # 29 : 40.72041437172049
FV at Mutated Child #2 at Generation # 29 : 8.75794347467262
--> Family: # 51
FV at Mutated Child #1 at Generation # 29 : 35.804043483233514
FV at Mutated Child #2 at Generation # 29 : 553.1599010002485
--> Family: # 52
FV at Mutated Child #1 at Generation # 29 : 165.82656786708017
FV at Mutated Child #2 at Generation # 29 : 185.31627372834015
--> Family: # 53
FV at Mutated Child #1 at Generation # 29 : 649.4744071400205
FV at Mutated Child #2 at Generation # 29 : 5.191116239135383
--> Family: # 54
FV at Mutated Child #1 at Generation # 29 : 10.936308507001192
FV at Mutated Child #2 at Generation # 29 : 33.43677420622097
--> Family: # 55
FV at Mutated Child #1 at Generation # 29 : 1.6127282426948986
FV at Mutated Child #2 at Generation # 29 : 11.896025930127003
--> Family: # 56
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FV at Mutated Child #1 at Generation # 29 : 461.9464843821687 FV at Mutated Child #2 at Generation # 29 : 1.3789543069469787 --> Family: # 57 FV at Mutated Child #1 at Generation # 29 : 7.732279617866382 FV at Mutated Child #2 at Generation # 29 : 36.512519874187745 --> Family: # 58 FV at Mutated Child #1 at Generation # 29 : 165.25701703944873 FV at Mutated Child #2 at Generation # 29 : 31.442886101337 --> Family: # 59 FV at Mutated Child #1 at Generation # 29 : 4.809791156510387 FV at Mutated Child #2 at Generation # 29 : 10.347971563928608 --> Family: # 60 FV at Mutated Child #1 at Generation # 29 : 2.8396154126355593 FV at Mutated Child #2 at Generation # 29 : 157.15744856518796 --> Family: # 61 FV at Mutated Child #1 at Generation # 29 : 8.75794347467262 FV at Mutated Child #2 at Generation # 29 : 1.9856890333324055 --> Family: # 62 FV at Mutated Child #1 at Generation # 29 : 8.5080816927174 FV at Mutated Child #2 at Generation # 29 : 40.793730584098114 --> Family: # 63 FV at Mutated Child #1 at Generation # 29 : 5.567769583245818 FV at Mutated Child #2 at Generation # 29 : 2.768620089774561 --> Family: # 64 FV at Mutated Child #1 at Generation # 29 : 143.3060866037549 FV at Mutated Child #2 at Generation # 29 : 1.896900215859689 --> Family: # 65 FV at Mutated Child #1 at Generation # 29 : 1.8090902374488684 FV at Mutated Child #2 at Generation # 29 : 1.191866594227706 --> Family: # 66 FV at Mutated Child #1 at Generation # 29 : 167.40416198189416 FV at Mutated Child #2 at Generation # 29 : 6.574718414056792 --> Family: # 67 FV at Mutated Child #1 at Generation # 29 : 45.09816589714229 FV at Mutated Child #2 at Generation # 29 : 0.8381688963994556 --> Family: # 68 FV at Mutated Child #1 at Generation # 29 : 1.5766430676141638 FV at Mutated Child #2 at Generation # 29 : 7.915338386407032 --> Family: # 69 FV at Mutated Child #1 at Generation # 29 : 1.746542510171781 FV at Mutated Child #2 at Generation # 29 : 10.469717408343072 --> Family: # 70

FV at Mutated Child #2 at Generation # 29 : 12.639365932565475 --> Family: # 71

FV at Mutated Child #1 at Generation # 29 : 6.385126748380521

FV at Mutated Child #1 at Generation # 29 : 1.5330745089733318

FV at Mutated Child #2 at Generation # 29 : 156.60716680835105 --> Family: # 72 FV at Mutated Child #1 at Generation # 29 : 619.6837474801823 FV at Mutated Child #2 at Generation # 29 : 3.1744990528802974 --> Family: # 73 FV at Mutated Child #1 at Generation # 29 : 34.44957778171481 FV at Mutated Child #2 at Generation # 29 : 12.24152368911861 --> Family: # 74 FV at Mutated Child #1 at Generation # 29 : 10.981816400106599 FV at Mutated Child #2 at Generation # 29 : 1.513367214420209 --> Family: # 75 FV at Mutated Child #1 at Generation # 29 : 6.277688098639593 FV at Mutated Child #2 at Generation # 29 : 24.096782020563875 --> Family: # 76 FV at Mutated Child #1 at Generation # 29 : 161.28401381159887 FV at Mutated Child #2 at Generation # 29 : 4.829256120077621 --> Family: # 77 FV at Mutated Child #1 at Generation # 29 : 149.47617556422418 FV at Mutated Child #2 at Generation # 29 : 0.8817015509167669 --> Family: # 78 FV at Mutated Child #1 at Generation # 29 : 13.476421000978187 FV at Mutated Child #2 at Generation # 29 : 1.1912005636485772 --> Family: # 79 FV at Mutated Child #1 at Generation # 29 : 164.5774094096859 FV at Mutated Child #2 at Generation # 29 : 110.26003521456128 --> Family: # 80 FV at Mutated Child #1 at Generation # 29 : 27.13262326934108 FV at Mutated Child #2 at Generation # 29 : 246.21813022108853 --> Generation: # 30 --> Family: # 1 FV at Mutated Child #1 at Generation # 30 : 0.6961370039798584 FV at Mutated Child #2 at Generation # 30 : 1.020801903859141 --> Family: # 2 FV at Mutated Child #1 at Generation # 30 : 139.1394632363835 FV at Mutated Child #2 at Generation # 30 : 0.6779501821376138 --> Family: # 3 FV at Mutated Child #1 at Generation # 30 : 18.16333967831516 FV at Mutated Child #2 at Generation # 30 : 132.97307576131018 --> Family: # 4 FV at Mutated Child #1 at Generation # 30 : 1.3989586376064098 FV at Mutated Child #2 at Generation # 30 : 536.6029967568336 --> Family: # 5 FV at Mutated Child #1 at Generation # 30 : 3.8983984025963307 FV at Mutated Child #2 at Generation # 30 : 5.397858116195569 --> Family: # 6

FV at Mutated Child #1 at Generation # 30 : 5.135945071272429

FV at Mutated Child #2 at Generation # 30 : 7.4021020542041756 --> Family: # 7 FV at Mutated Child #1 at Generation # 30 : 5.809182666041943 FV at Mutated Child #2 at Generation # 30 : 33.366132220445145 --> Family: # 8 FV at Mutated Child #1 at Generation # 30 : 2206.3880065687185 FV at Mutated Child #2 at Generation # 30 : 24.12061807699252 --> Family: # 9 FV at Mutated Child #1 at Generation # 30 : 17.274747403728227 FV at Mutated Child #2 at Generation # 30 : 104.83106140765427 --> Family: # 10 FV at Mutated Child #1 at Generation # 30 : 1.092370264410635 FV at Mutated Child #2 at Generation # 30 : 90.30128560285769 --> Family: # 11 FV at Mutated Child #1 at Generation # 30 : 16.361550709188514 FV at Mutated Child #2 at Generation # 30 : 7.992396649574713 --> Family: # 12 FV at Mutated Child #1 at Generation # 30 : 0.5766390082893942 FV at Mutated Child #2 at Generation # 30 : 5.139101326360542 --> Family: # 13 FV at Mutated Child #1 at Generation # 30 : 9.523904299137916 FV at Mutated Child #2 at Generation # 30 : 79.68285272034416 --> Family: # 14 FV at Mutated Child #1 at Generation # 30 : 30.676518137332526 FV at Mutated Child #2 at Generation # 30 : 32.75367950294027 --> Family: # 15 FV at Mutated Child #1 at Generation # 30 : 112.65943546865537 FV at Mutated Child #2 at Generation # 30 : 3.3532239821894487 --> Family: # 16 FV at Mutated Child #1 at Generation # 30 : 130.8208160430231 FV at Mutated Child #2 at Generation # 30 : 23.584226099547866 --> Family: # 17 FV at Mutated Child #1 at Generation # 30 : 2170.291295239522 FV at Mutated Child #2 at Generation # 30 : 1313.4524060208203 --> Family: # 18 FV at Mutated Child #1 at Generation # 30 : 100.04616923540466 FV at Mutated Child #2 at Generation # 30 : 25.923935601813696 --> Family: # 19 FV at Mutated Child #1 at Generation # 30 : 12.510772443352415 FV at Mutated Child #2 at Generation # 30 : 2.6598914887434852 --> Family: # 20 FV at Mutated Child #1 at Generation # 30 : 3.7180861165294252 FV at Mutated Child #2 at Generation # 30 : 7.489578839454334 --> Family: # 21 FV at Mutated Child #1 at Generation # 30 : 19.75656790488896 FV at Mutated Child #2 at Generation # 30 : 0.8478636795178642

--> Family: # 22

FV at Mutated Child #1 at Generation # 30 : 2479.2456845787633 FV at Mutated Child #2 at Generation # 30 : 0.6878148434150498

--> Family: # 23

FV at Mutated Child #1 at Generation # 30 : 10.755203167938381 FV at Mutated Child #2 at Generation # 30 : 11.172213566826171

--> Family: # 24

FV at Mutated Child #1 at Generation # 30 : 7.994409373229841 FV at Mutated Child #2 at Generation # 30 : 65.98029879743349

--> Family: # 25

FV at Mutated Child #1 at Generation # 30 : 2411.4515257181915 FV at Mutated Child #2 at Generation # 30 : 0.6779501821376138

--> Family: # 26

FV at Mutated Child #1 at Generation # 30 : 1.9736785301329847 FV at Mutated Child #2 at Generation # 30 : 2.587443626069436 --> Family: # 27

FV at Mutated Child #1 at Generation # 30 : 6.179454808408179 FV at Mutated Child #2 at Generation # 30 : 3.6609005955018525 --> Family: # 28

FV at Mutated Child #1 at Generation # 30 : 2.332154598879205 FV at Mutated Child #2 at Generation # 30 : 144.73768278453042 --> Family: # 29

FV at Mutated Child #1 at Generation # 30 : 130.88702250356414 FV at Mutated Child #2 at Generation # 30 : 0.8097012057069883 --> Family: # 30

FV at Mutated Child #1 at Generation # 30 : 392.6957989209029 FV at Mutated Child #2 at Generation # 30 : 556.5560825217786 --> Family: # 31

FV at Mutated Child #1 at Generation # 30 : 4.07764322339606 FV at Mutated Child #2 at Generation # 30 : 32.75367950294027 --> Family: # 32

FV at Mutated Child #1 at Generation # 30 : 146.38354222468686 FV at Mutated Child #2 at Generation # 30 : 162.9710378435411 --> Family: # 33

FV at Mutated Child #1 at Generation # 30 : 5.6579337310566125 FV at Mutated Child #2 at Generation # 30 : 1.067559750247843 --> Family: # 34

FV at Mutated Child #1 at Generation # 30 : 1.3656364692204876 FV at Mutated Child #2 at Generation # 30 : 109.84018023236042 --> Family: # 35

FV at Mutated Child #1 at Generation # 30 : 33.66396663280105 FV at Mutated Child #2 at Generation # 30 : 1.1207445305904102 --> Family: # 36

FV at Mutated Child #1 at Generation # 30 : 17.082209754360633 FV at Mutated Child #2 at Generation # 30 : 30.036964341244765 --> Family: # 37

FV at Mutated Child #1 at Generation # 30 : 3.6327944113123403 FV at Mutated Child #2 at Generation # 30 : 214.85430309130547 --> Family: # 38 FV at Mutated Child #1 at Generation # 30 : 2450.084791453464 FV at Mutated Child #2 at Generation # 30 : 2478.704440286041 --> Family: # 39 FV at Mutated Child #1 at Generation # 30 : 3.3070352807203536 FV at Mutated Child #2 at Generation # 30 : 657.7695643826381 --> Family: # 40 FV at Mutated Child #1 at Generation # 30 : 6.391165657575672 FV at Mutated Child #2 at Generation # 30 : 570.7841081028658 --> Family: # 41 FV at Mutated Child #1 at Generation # 30 : 30.676518137332526 FV at Mutated Child #2 at Generation # 30 : 7.42602206893293 --> Family: # 42 FV at Mutated Child #1 at Generation # 30 : 0.8523925445201574 FV at Mutated Child #2 at Generation # 30 : 5.720410275472966 --> Family: # 43 FV at Mutated Child #1 at Generation # 30 : 102.2078954218209 FV at Mutated Child #2 at Generation # 30 : 144.40407840589006 --> Family: # 44 FV at Mutated Child #1 at Generation # 30 : 3.360918054670476 FV at Mutated Child #2 at Generation # 30 : 1.8047196111338017 --> Family: # 45 FV at Mutated Child #1 at Generation # 30 : 4.023172005108701 FV at Mutated Child #2 at Generation # 30 : 7.564769863531096 --> Family: # 46 FV at Mutated Child #1 at Generation # 30 : 0.7641242731796084 FV at Mutated Child #2 at Generation # 30 : 1.0933166964549366 --> Family: # 47 FV at Mutated Child #1 at Generation # 30 : 6.575537000572623 FV at Mutated Child #2 at Generation # 30 : 0.6455777423039931 --> Family: # 48 FV at Mutated Child #1 at Generation # 30 : 27.774665849752207 FV at Mutated Child #2 at Generation # 30 : 4.092486431295769 --> Family: # 49 FV at Mutated Child #1 at Generation # 30 : 2.273658762555657 FV at Mutated Child #2 at Generation # 30 : 32.59345259900307 --> Family: # 50 FV at Mutated Child #1 at Generation # 30 : 1.5809754491133283 FV at Mutated Child #2 at Generation # 30 : 1.704424076200426 --> Family: # 51 FV at Mutated Child #1 at Generation # 30 : 574.6427470830583 FV at Mutated Child #2 at Generation # 30 : 29.24866394402832 --> Family: # 52

FV at Mutated Child #1 at Generation # 30 : 1.820015557039838 FV at Mutated Child #2 at Generation # 30 : 0.6843736792465577 --> Family: # 53 FV at Mutated Child #1 at Generation # 30 : 8.815716145419726 FV at Mutated Child #2 at Generation # 30 : 122.24181865508301 --> Family: # 54 FV at Mutated Child #1 at Generation # 30 : 5.1942415525885455 FV at Mutated Child #2 at Generation # 30 : 1.784139872314526 --> Family: # 55 FV at Mutated Child #1 at Generation # 30 : 0.7040714401963116 FV at Mutated Child #2 at Generation # 30 : 0.8738425230693616 --> Family: # 56 FV at Mutated Child #1 at Generation # 30 : 0.5341962273520161 FV at Mutated Child #2 at Generation # 30 : 0.6985518421683148 --> Family: # 57 FV at Mutated Child #1 at Generation # 30 : 3.503908057526374 FV at Mutated Child #2 at Generation # 30 : 4.408263271090233 --> Family: # 58 FV at Mutated Child #1 at Generation # 30 : 5.050350644270434 FV at Mutated Child #2 at Generation # 30 : 2.2610315149632827 --> Family: # 59 FV at Mutated Child #1 at Generation # 30 : 0.9867574097302401 FV at Mutated Child #2 at Generation # 30 : 0.6872037318586184 --> Family: # 60 FV at Mutated Child #1 at Generation # 30 : 0.6320772032890627 FV at Mutated Child #2 at Generation # 30 : 1.0776464900378888 --> Family: # 61 FV at Mutated Child #1 at Generation # 30 : 3.2798150031611724 FV at Mutated Child #2 at Generation # 30 : 24.13921204662891 --> Family: # 62 FV at Mutated Child #1 at Generation # 30 : 6.272369200574384 FV at Mutated Child #2 at Generation # 30 : 29.386814196084295 --> Family: # 63 FV at Mutated Child #1 at Generation # 30 : 3.299094706055027 FV at Mutated Child #2 at Generation # 30 : 2428.2192785207735 --> Family: # 64 FV at Mutated Child #1 at Generation # 30 : 7.374397958690402 FV at Mutated Child #2 at Generation # 30 : 30.783740831803506 --> Family: # 65 FV at Mutated Child #1 at Generation # 30 : 33.717117895283295 FV at Mutated Child #2 at Generation # 30 : 0.7797340420421328 --> Family: # 66 FV at Mutated Child #1 at Generation # 30 : 4.6845749075456755

FV at Mutated Child #2 at Generation # 30 : 33.87052536034281 --> Family: # 67

FV at Mutated Child #1 at Generation # 30 : 1.4656259451341365

FV at Mutated Child #2 at Generation # 30 : 4.469002307538619 --> Family: # 68 FV at Mutated Child #1 at Generation # 30 : 2350.7524415802477 FV at Mutated Child #2 at Generation # 30 : 1.5542401611469614 --> Family: # 69 FV at Mutated Child #1 at Generation # 30 : 597.6013665743643 FV at Mutated Child #2 at Generation # 30 : 0.809005006080028 --> Family: # 70 FV at Mutated Child #1 at Generation # 30 : 0.6870868914022138 FV at Mutated Child #2 at Generation # 30 : 0.727840154900857 --> Family: # 71 FV at Mutated Child #1 at Generation # 30 : 41.5924264730018 FV at Mutated Child #2 at Generation # 30 : 1.931998938241711 --> Family: # 72 FV at Mutated Child #1 at Generation # 30 : 475.1605315043126 FV at Mutated Child #2 at Generation # 30 : 1.4398442304508778 --> Family: # 73 FV at Mutated Child #1 at Generation # 30 : 3.369969424301678 FV at Mutated Child #2 at Generation # 30 : 0.5002070819145751 --> Family: # 74 FV at Mutated Child #1 at Generation # 30 : 570.5521546137945 FV at Mutated Child #2 at Generation # 30 : 173.39573644417527 --> Family: # 75 FV at Mutated Child #1 at Generation # 30 : 1.7300080896081904 FV at Mutated Child #2 at Generation # 30 : 13.51695171084345 --> Family: # 76 FV at Mutated Child #1 at Generation # 30 : 30.895928570579596 FV at Mutated Child #2 at Generation # 30 : 15.932052230044041 --> Family: # 77 FV at Mutated Child #1 at Generation # 30 : 0.7420920120412646 FV at Mutated Child #2 at Generation # 30 : 1.2316532002098965 --> Family: # 78 FV at Mutated Child #1 at Generation # 30 : 21.61550070942898 FV at Mutated Child #2 at Generation # 30 : 1.2700035981224236 --> Family: # 79 FV at Mutated Child #1 at Generation # 30 : 35.18975272346003 FV at Mutated Child #2 at Generation # 30 : 33.66396663280105 --> Family: # 80 FV at Mutated Child #1 at Generation # 30 : 109.40892726732821 FV at Mutated Child #2 at Generation # 30 : 34.55371011073264 --> Generation: # 31 --> Family: # 1 FV at Mutated Child #1 at Generation # 31 : 33.10494365443614 FV at Mutated Child #2 at Generation # 31 : 544.8281200601234 --> Family: # 2

FV at Mutated Child #1 at Generation # 31 : 110.39339033983407

FV at Mutated Child #2 at Generation # 31 : 31.359623607510464 --> Family: # 3 FV at Mutated Child #1 at Generation # 31 : 96.75545756518305 FV at Mutated Child #2 at Generation # 31 : 0.8016177353105083 --> Family: # 4 FV at Mutated Child #1 at Generation # 31 : 4.031504086206639 FV at Mutated Child #2 at Generation # 31 : 5.804758357584215 --> Family: # 5 FV at Mutated Child #1 at Generation # 31 : 7.919246121412973 FV at Mutated Child #2 at Generation # 31 : 2.012326270332028 --> Family: # 6 FV at Mutated Child #1 at Generation # 31 : 12.14266244583599 FV at Mutated Child #2 at Generation # 31 : 2359.434810727015 --> Family: # 7 FV at Mutated Child #1 at Generation # 31 : 13.495111743722035 FV at Mutated Child #2 at Generation # 31 : 28.872242153138718 --> Family: # 8 FV at Mutated Child #1 at Generation # 31 : 33.63868533856546 FV at Mutated Child #2 at Generation # 31 : 1.119658938514782 --> Family: # 9 FV at Mutated Child #1 at Generation # 31 : 598.6237783254063 FV at Mutated Child #2 at Generation # 31 : 38.62361125046631 --> Family: # 10 FV at Mutated Child #1 at Generation # 31 : 7.906043999295827 FV at Mutated Child #2 at Generation # 31 : 1.089871287193247 --> Family: # 11 FV at Mutated Child #1 at Generation # 31 : 24.452841273230593 FV at Mutated Child #2 at Generation # 31 : 1.0797402343588949 --> Family: # 12 FV at Mutated Child #1 at Generation # 31 : 12.83629936578639 FV at Mutated Child #2 at Generation # 31 : 20.14517594129337 --> Family: # 13 FV at Mutated Child #1 at Generation # 31 : 21.977828006309707 FV at Mutated Child #2 at Generation # 31 : 95.09001246332427 --> Family: # 14 FV at Mutated Child #1 at Generation # 31 : 4.5636007475928295 FV at Mutated Child #2 at Generation # 31 : 0.9036212795830473 --> Family: # 15 FV at Mutated Child #1 at Generation # 31 : 224.20352355489 FV at Mutated Child #2 at Generation # 31 : 569.7151122186707 --> Family: # 16 FV at Mutated Child #1 at Generation # 31 : 21.88355749448065 FV at Mutated Child #2 at Generation # 31 : 158.13953678562694 --> Family: # 17 FV at Mutated Child #1 at Generation # 31 : 548.9280223245175 FV at Mutated Child #2 at Generation # 31 : 109.09765888977756

Ex_1_2_3 --> Family: # 18 FV at Mutated Child #1 at Generation # 31 : 1.3572228361775132 FV at Mutated Child #2 at Generation # 31 : 2.0003718959944043 --> Family: # 19 FV at Mutated Child #1 at Generation # 31 : 11.736069646254228 FV at Mutated Child #2 at Generation # 31 : 3.7622929158402107 --> Family: # 20 FV at Mutated Child #1 at Generation # 31 : 2410.1226945696453 FV at Mutated Child #2 at Generation # 31 : 6.433025689724113 --> Family: # 21 FV at Mutated Child #1 at Generation # 31 : 2170.842974683045 FV at Mutated Child #2 at Generation # 31 : 6.721455676271082 --> Family: # 22 FV at Mutated Child #1 at Generation # 31 : 2.292429364725717 FV at Mutated Child #2 at Generation # 31 : 12.111437332316726 --> Family: # 23 FV at Mutated Child #1 at Generation # 31 : 3.6781503340509083 FV at Mutated Child #2 at Generation # 31 : 1.7734593973627306 --> Family: # 24 FV at Mutated Child #1 at Generation # 31 : 5.931918379375729 FV at Mutated Child #2 at Generation # 31 : 21.082735004686537 --> Family: # 25 FV at Mutated Child #1 at Generation # 31 : 0.7031872947688566 FV at Mutated Child #2 at Generation # 31 : 0.7031872947688566 --> Family: # 26 FV at Mutated Child #1 at Generation # 31 : 16.65031581231725 FV at Mutated Child #2 at Generation # 31 : 2.1989006676977128 --> Family: # 27 FV at Mutated Child #1 at Generation # 31 : 2308.7176828935853 FV at Mutated Child #2 at Generation # 31 : 1435.0074569063556 --> Family: # 28 FV at Mutated Child #1 at Generation # 31 : 4.138518217556171 FV at Mutated Child #2 at Generation # 31 : 4.139238059338286 --> Family: # 29 FV at Mutated Child #1 at Generation # 31 : 2460.7057392309216 FV at Mutated Child #2 at Generation # 31 : 4.883498202437901 --> Family: # 30 FV at Mutated Child #1 at Generation # 31 : 1.0067593213945885 FV at Mutated Child #2 at Generation # 31 : 125.90896199715459 --> Family: # 31 FV at Mutated Child #1 at Generation # 31 : 6.080645094858526 FV at Mutated Child #2 at Generation # 31 : 598.2270007058811 --> Family: # 32

localhost:8888/nbconvert/html/Desktop/Matheuristics/Ex 1 2 3.ipynb?download=false

--> Family: # 33

FV at Mutated Child #1 at Generation # 31 : 2.905889092886144 FV at Mutated Child #2 at Generation # 31 : 0.9677035033173468

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FV at Mutated Child #1 at Generation # 31 : 134.55015305304713
FV at Mutated Child #2 at Generation # 31 : 194.21174403217503
--> Family: # 34
FV at Mutated Child #1 at Generation # 31 : 10.542517580948214
FV at Mutated Child #2 at Generation # 31 : 106.58719978679811
--> Family: # 35
FV at Mutated Child #1 at Generation # 31 : 8.518421871012851
FV at Mutated Child #2 at Generation # 31 : 33.32712056046043
--> Family: # 36
FV at Mutated Child #1 at Generation # 31 : 2518.5869499262976
FV at Mutated Child #2 at Generation # 31 : 149.3091973018093
--> Family: # 37
FV at Mutated Child #1 at Generation # 31 : 116.48195629088688
FV at Mutated Child #2 at Generation # 31 : 105.39509588316473
--> Family: # 38
FV at Mutated Child #1 at Generation # 31 : 1.578766718676988
FV at Mutated Child #2 at Generation # 31 : 551.7864442518954
--> Family: # 39
FV at Mutated Child #1 at Generation # 31 : 541.5745382318551
FV at Mutated Child #2 at Generation # 31 : 8.89785498179177
--> Family: # 40
FV at Mutated Child #1 at Generation # 31 : 6.802356946338791
FV at Mutated Child #2 at Generation # 31 : 154.26543462046533
--> Family: # 41
FV at Mutated Child #1 at Generation # 31 : 8.444455569888223
FV at Mutated Child #2 at Generation # 31 : 18.62872561474922
--> Family: # 42
FV at Mutated Child #1 at Generation # 31 : 0.6890078513805139
FV at Mutated Child #2 at Generation # 31 : 33.50775651089229
--> Family: # 43
FV at Mutated Child #1 at Generation # 31 : 6.36679728335491
FV at Mutated Child #2 at Generation # 31 : 27.017454488529353
--> Family: # 44
FV at Mutated Child #1 at Generation # 31 : 97.97890396472918
FV at Mutated Child #2 at Generation # 31 : 102.82692381617404
--> Family: # 45
FV at Mutated Child #1 at Generation # 31 : 10.438915989764684
FV at Mutated Child #2 at Generation # 31 : 8.28934333722081
--> Family: # 46
FV at Mutated Child #1 at Generation # 31 : 31.850494455306098
FV at Mutated Child #2 at Generation # 31 : 2.952807467842813
--> Family: # 47
FV at Mutated Child #1 at Generation # 31 : 10.320344571326217
FV at Mutated Child #2 at Generation # 31 : 99.5827767553236
--> Family: # 48
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FV at Mutated Child #1 at Generation # 31 : 2.345812114304158 FV at Mutated Child #2 at Generation # 31 : 41.34080094418126 --> Family: # 49 FV at Mutated Child #1 at Generation # 31 : 27.62671913934059 FV at Mutated Child #2 at Generation # 31 : 164.79068158391163 --> Family: # 50 FV at Mutated Child #1 at Generation # 31 : 589.8171567904001 FV at Mutated Child #2 at Generation # 31 : 11.81779882859719 --> Family: # 51 FV at Mutated Child #1 at Generation # 31 : 8.369013637314957 FV at Mutated Child #2 at Generation # 31 : 512.8211431320223 --> Family: # 52 FV at Mutated Child #1 at Generation # 31 : 5.455584940447326 FV at Mutated Child #2 at Generation # 31 : 38.93727553227543 --> Family: # 53 FV at Mutated Child #1 at Generation # 31 : 109.4943679678901 FV at Mutated Child #2 at Generation # 31 : 38.34919826512635 --> Family: # 54 FV at Mutated Child #1 at Generation # 31 : 0.9568452629516915 FV at Mutated Child #2 at Generation # 31 : 1.7043919216342585 --> Family: # 55 FV at Mutated Child #1 at Generation # 31 : 119.49234599834398 FV at Mutated Child #2 at Generation # 31 : 3.3430346056278353 --> Family: # 56 FV at Mutated Child #1 at Generation # 31 : 1.3476287810387817 FV at Mutated Child #2 at Generation # 31 : 33.243405915908596 --> Family: # 57 FV at Mutated Child #1 at Generation # 31 : 566.236236115257 FV at Mutated Child #2 at Generation # 31 : 5.502450249660558 --> Family: # 58 FV at Mutated Child #1 at Generation # 31 : 12.58974134500516 FV at Mutated Child #2 at Generation # 31 : 33.99377558911899 --> Family: # 59 FV at Mutated Child #1 at Generation # 31 : 41.708367201249104 FV at Mutated Child #2 at Generation # 31 : 154.26543462046533 --> Family: # 60 FV at Mutated Child #1 at Generation # 31 : 139.70930989078323 FV at Mutated Child #2 at Generation # 31 : 0.6653646592504334 --> Family: # 61 FV at Mutated Child #1 at Generation # 31 : 3.1738310496213997 FV at Mutated Child #2 at Generation # 31 : 13.111769695745352 --> Family: # 62 FV at Mutated Child #1 at Generation # 31 : 1.0712114227328502 FV at Mutated Child #2 at Generation # 31 : 149.06401870442406

--> Family: # 63

FV at Mutated Child #1 at Generation # 31 : 2338.743756798459

FV at Mutated Child #2 at Generation # 31 : 2324.943194368378 --> Family: # 64 FV at Mutated Child #1 at Generation # 31 : 41.809220881493054 FV at Mutated Child #2 at Generation # 31 : 1.565486539794728 --> Family: # 65 FV at Mutated Child #1 at Generation # 31 : 1.237388380500109 FV at Mutated Child #2 at Generation # 31 : 17.447342477622506 --> Family: # 66 FV at Mutated Child #1 at Generation # 31 : 4.871455429264161 FV at Mutated Child #2 at Generation # 31 : 11.88430938144996 --> Family: # 67 FV at Mutated Child #1 at Generation # 31 : 2465.996709796014 FV at Mutated Child #2 at Generation # 31 : 10.169334547375254 --> Family: # 68 FV at Mutated Child #1 at Generation # 31 : 13.229773195342718 FV at Mutated Child #2 at Generation # 31 : 1.19605513017787 --> Family: # 69 FV at Mutated Child #1 at Generation # 31 : 571.13828301553 FV at Mutated Child #2 at Generation # 31 : 10.169334547375254 --> Family: # 70 FV at Mutated Child #1 at Generation # 31 : 6.260599697852173 FV at Mutated Child #2 at Generation # 31 : 32.770983119318394 --> Family: # 71 FV at Mutated Child #1 at Generation # 31 : 0.9616547254547136 FV at Mutated Child #2 at Generation # 31 : 2.3591870538106434 --> Family: # 72 FV at Mutated Child #1 at Generation # 31 : 15.098048786769263 FV at Mutated Child #2 at Generation # 31 : 5.055478270530279 --> Family: # 73 FV at Mutated Child #1 at Generation # 31 : 575.1895130786138 FV at Mutated Child #2 at Generation # 31: 38.493373364815476 --> Family: # 74 FV at Mutated Child #1 at Generation # 31 : 618.6069787217356 FV at Mutated Child #2 at Generation # 31 : 154.11093970042222 --> Family: # 75 FV at Mutated Child #1 at Generation # 31 : 100.97332425552217 FV at Mutated Child #2 at Generation # 31 : 110.82699884022779 --> Family: # 76 FV at Mutated Child #1 at Generation # 31 : 35.94648023867701 FV at Mutated Child #2 at Generation # 31 : 2.3154161302131144 --> Family: # 77 FV at Mutated Child #1 at Generation # 31 : 3.5230669152849834 FV at Mutated Child #2 at Generation # 31 : 141.97408855366723 --> Family: # 78 FV at Mutated Child #1 at Generation # 31 : 9.281613833727592 FV at Mutated Child #2 at Generation # 31 : 4.300456496694954

Ex_1_2_3 --> Family: # 79 FV at Mutated Child #1 at Generation # 31 : 1590.3033658725876 FV at Mutated Child #2 at Generation # 31 : 8.52097896887106 --> Family: # 80 FV at Mutated Child #1 at Generation # 31 : 57.2863856426971 FV at Mutated Child #2 at Generation # 31 : 131.8995494548036 --> Generation: # 32 --> Family: # 1 FV at Mutated Child #1 at Generation # 32 : 4.6845749075456755 FV at Mutated Child #2 at Generation # 32 : 1.2316532002098965 --> Family: # 2 FV at Mutated Child #1 at Generation # 32 : 143.72395983775883 FV at Mutated Child #2 at Generation # 32 : 1398.0035861815354 --> Family: # 3 FV at Mutated Child #1 at Generation # 32 : 1932.629883385484 FV at Mutated Child #2 at Generation # 32 : 2533.20065110584 --> Family: # 4 FV at Mutated Child #1 at Generation # 32 : 0.8259249075967671 FV at Mutated Child #2 at Generation # 32 : 578.0763123018254 --> Family: # 5 FV at Mutated Child #1 at Generation # 32 : 14.703112769536057 FV at Mutated Child #2 at Generation # 32 : 2.7991686307757733 --> Family: # 6 FV at Mutated Child #1 at Generation # 32 : 1.7518359915889334 FV at Mutated Child #2 at Generation # 32 : 28.800974373868904 --> Family: # 7 FV at Mutated Child #1 at Generation # 32 : 33.712270412365356 FV at Mutated Child #2 at Generation # 32 : 38.30785375386441 --> Family: # 8 FV at Mutated Child #1 at Generation # 32 : 2.035624097838694 FV at Mutated Child #2 at Generation # 32 : 2451.130630494089 --> Family: # 9 FV at Mutated Child #1 at Generation # 32 : 8.023427494370672 FV at Mutated Child #2 at Generation # 32 : 0.7679862532539056 --> Family: # 10 FV at Mutated Child #1 at Generation # 32 : 39.19031466034303 FV at Mutated Child #2 at Generation # 32 : 6.36213915706878 --> Family: # 11 FV at Mutated Child #1 at Generation # 32 : 1.6647551637830038 FV at Mutated Child #2 at Generation # 32 : 2344.003637103008 --> Family: # 12 FV at Mutated Child #1 at Generation # 32 : 0.9416140383852762 FV at Mutated Child #2 at Generation # 32 : 14.42317255158503 --> Family: # 13 FV at Mutated Child #1 at Generation # 32 : 0.6839374167924768

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FV at Mutated Child #2 at Generation # 32 : 0.6827585528472163

Ex_1_2_3 --> Family: # 14 FV at Mutated Child #1 at Generation # 32 : 144.62052665649256 FV at Mutated Child #2 at Generation # 32 : 0.7137594232136298 --> Family: # 15 FV at Mutated Child #1 at Generation # 32 : 13.356019598908222 FV at Mutated Child #2 at Generation # 32 : 3.206068613050257 --> Family: # 16 FV at Mutated Child #1 at Generation # 32 : 8.075004094002207 FV at Mutated Child #2 at Generation # 32 : 7.208901015898265 --> Family: # 17 FV at Mutated Child #1 at Generation # 32 : 0.6870868914022138 FV at Mutated Child #2 at Generation # 32 : 24.985451405848238 --> Family: # 18 FV at Mutated Child #1 at Generation # 32 : 0.9920653822386531 FV at Mutated Child #2 at Generation # 32 : 5.006053001137926 --> Family: # 19 FV at Mutated Child #1 at Generation # 32 : 30.103567827897418 FV at Mutated Child #2 at Generation # 32 : 25.956703490750005 --> Family: # 20 FV at Mutated Child #1 at Generation # 32 : 1.2357026986227695 FV at Mutated Child #2 at Generation # 32 : 14.923623136090495 --> Family: # 21 FV at Mutated Child #1 at Generation # 32 : 3.369969424301678 FV at Mutated Child #2 at Generation # 32 : 553.6270705997044 --> Family: # 22 FV at Mutated Child #1 at Generation # 32 : 2.4170584564557727 FV at Mutated Child #2 at Generation # 32 : 5.878177730244882 --> Family: # 23 FV at Mutated Child #1 at Generation # 32 : 1.7518359915889334 FV at Mutated Child #2 at Generation # 32 : 143.76740280491683 --> Family: # 24 FV at Mutated Child #1 at Generation # 32 : 1.0273834879369375 FV at Mutated Child #2 at Generation # 32 : 26.02453271605178 --> Family: # 25 FV at Mutated Child #1 at Generation # 32 : 6.132415908557941 FV at Mutated Child #2 at Generation # 32 : 6.095865124797293 --> Family: # 26 FV at Mutated Child #1 at Generation # 32 : 0.6658728539442936 FV at Mutated Child #2 at Generation # 32 : 4.090093358417764 --> Family: # 27 FV at Mutated Child #1 at Generation # 32 : 9.149187645484822 FV at Mutated Child #2 at Generation # 32 : 67.3331901959703 --> Family: # 28 FV at Mutated Child #1 at Generation # 32 : 9.40614261143743 FV at Mutated Child #2 at Generation # 32 : 0.5151777900146968

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--> Family: # 29

```
FV at Mutated Child #1 at Generation # 32 : 6.276893815689023
FV at Mutated Child #2 at Generation # 32 : 9.462396943174145
--> Family: # 30
FV at Mutated Child #1 at Generation # 32 : 6.664748532282393
FV at Mutated Child #2 at Generation # 32 : 7.076021098661235
--> Family: # 31
FV at Mutated Child #1 at Generation # 32 : 1.370871741122989
FV at Mutated Child #2 at Generation # 32 : 77.85423152769884
--> Family: # 32
FV at Mutated Child #1 at Generation # 32 : 2.6379026750441215
FV at Mutated Child #2 at Generation # 32 : 33.57196496798366
--> Family: # 33
FV at Mutated Child #1 at Generation # 32 : 31.655911789331522
FV at Mutated Child #2 at Generation # 32 : 1.2316532002098965
--> Family: # 34
FV at Mutated Child #1 at Generation # 32 : 0.6878148434150498
FV at Mutated Child #2 at Generation # 32 : 10.16903429274164
--> Family: # 35
FV at Mutated Child #1 at Generation # 32 : 29.379732510882004
FV at Mutated Child #2 at Generation # 32 : 0.9302563079265795
--> Family: # 36
FV at Mutated Child #1 at Generation # 32 : 514.5123594525281
FV at Mutated Child #2 at Generation # 32 : 539.4721727775168
--> Family: # 37
FV at Mutated Child #1 at Generation # 32 : 2.7807593131443222
FV at Mutated Child #2 at Generation # 32 : 24.42828127370334
--> Family: # 38
FV at Mutated Child #1 at Generation # 32 : 35.555748922360536
FV at Mutated Child #2 at Generation # 32 : 1.058311415660305
--> Family: # 39
FV at Mutated Child #1 at Generation # 32 : 3.877612582079017
FV at Mutated Child #2 at Generation # 32 : 4.215216512158643
--> Family: # 40
FV at Mutated Child #1 at Generation # 32 : 2402.4984652680646
FV at Mutated Child #2 at Generation # 32 : 984.8270126048552
--> Family: # 41
FV at Mutated Child #1 at Generation # 32 : 0.6997285472045858
FV at Mutated Child #2 at Generation # 32 : 6.018349626422284
--> Family: # 42
FV at Mutated Child #1 at Generation # 32 : 1.5955034750884298
FV at Mutated Child #2 at Generation # 32 : 508.0982471808671
--> Family: # 43
FV at Mutated Child #1 at Generation # 32 : 1.0431303334510147
FV at Mutated Child #2 at Generation # 32 : 11.717560917855172
--> Family: # 44
```

FV at Mutated Child #1 at Generation # 32 : 111.4165839746636 FV at Mutated Child #2 at Generation # 32 : 4.590311908481568 --> Family: # 45 FV at Mutated Child #1 at Generation # 32 : 117.87175556560835 FV at Mutated Child #2 at Generation # 32 : 105.19460368111879 --> Family: # 46 FV at Mutated Child #1 at Generation # 32 : 9.496023223744496 FV at Mutated Child #2 at Generation # 32 : 0.7436895056038384 --> Family: # 47 FV at Mutated Child #1 at Generation # 32 : 2.3621896524204335 FV at Mutated Child #2 at Generation # 32 : 146.5028442157703 --> Family: # 48 FV at Mutated Child #1 at Generation # 32 : 1.1927603151473845 FV at Mutated Child #2 at Generation # 32 : 2.5797212237860188 --> Family: # 49 FV at Mutated Child #1 at Generation # 32 : 25.3008023441696 FV at Mutated Child #2 at Generation # 32 : 81.11437543839689 --> Family: # 50 FV at Mutated Child #1 at Generation # 32 : 11.040052628782522 FV at Mutated Child #2 at Generation # 32 : 0.7063974998841028 --> Family: # 51 FV at Mutated Child #1 at Generation # 32 : 2.62813778424536 FV at Mutated Child #2 at Generation # 32 : 134.66342548992463 --> Family: # 52 FV at Mutated Child #1 at Generation # 32 : 0.6574664800775957 FV at Mutated Child #2 at Generation # 32 : 80.92960505308999 --> Family: # 53 FV at Mutated Child #1 at Generation # 32 : 6.627925533743775 FV at Mutated Child #2 at Generation # 32 : 2.69152859092543 --> Family: # 54 FV at Mutated Child #1 at Generation # 32 : 11.843749602305776 FV at Mutated Child #2 at Generation # 32 : 26.830624464846586 --> Family: # 55 FV at Mutated Child #1 at Generation # 32 : 0.6270180544792798 FV at Mutated Child #2 at Generation # 32 : 36.23859304280517 --> Family: # 56 FV at Mutated Child #1 at Generation # 32 : 25.35251673871641 FV at Mutated Child #2 at Generation # 32 : 0.6888563037730879 --> Family: # 57 FV at Mutated Child #1 at Generation # 32 : 17.29707149270786 FV at Mutated Child #2 at Generation # 32 : 1.1650456826160775 --> Family: # 58 FV at Mutated Child #1 at Generation # 32 : 0.6175692355137041 FV at Mutated Child #2 at Generation # 32 : 1.0288275021277988

--> Family: # 59

FV at Mutated Child #1 at Generation # 32 : 11.946485761468228

FV at Mutated Child #2 at Generation # 32 : 5.96844946695777 --> Family: # 60 FV at Mutated Child #1 at Generation # 32 : 1.8799862037582655 FV at Mutated Child #2 at Generation # 32 : 17.254290910001796 --> Family: # 61 FV at Mutated Child #1 at Generation # 32 : 11.414974633567297 FV at Mutated Child #2 at Generation # 32 : 14.93142549559385 --> Family: # 62 FV at Mutated Child #1 at Generation # 32 : 0.6870868914022138 FV at Mutated Child #2 at Generation # 32 : 141.41620342383493 --> Family: # 63 FV at Mutated Child #1 at Generation # 32 : 0.6893333109535634 FV at Mutated Child #2 at Generation # 32 : 1.2734768703471313 --> Family: # 64 FV at Mutated Child #1 at Generation # 32 : 1.543451465354365 FV at Mutated Child #2 at Generation # 32 : 0.7438042170722029 --> Family: # 65 FV at Mutated Child #1 at Generation # 32 : 49.06605129965165 FV at Mutated Child #2 at Generation # 32 : 2.8480086050196665 --> Family: # 66 FV at Mutated Child #1 at Generation # 32 : 0.6964288569437237 FV at Mutated Child #2 at Generation # 32 : 0.7249960883061904 --> Family: # 67 FV at Mutated Child #1 at Generation # 32 : 2.7380245605496323 FV at Mutated Child #2 at Generation # 32 : 25.21245620085634 --> Family: # 68 FV at Mutated Child #1 at Generation # 32 : 20.030437967458973 FV at Mutated Child #2 at Generation # 32 : 8.491569428261144 --> Family: # 69 FV at Mutated Child #1 at Generation # 32 : 20.774436830885648 FV at Mutated Child #2 at Generation # 32 : 83.54701283249825 --> Family: # 70 FV at Mutated Child #1 at Generation # 32 : 1.9789986396705017 FV at Mutated Child #2 at Generation # 32 : 3.5344505555169135 --> Family: # 71 FV at Mutated Child #1 at Generation # 32 : 14.242332766171117 FV at Mutated Child #2 at Generation # 32 : 2.035732851008453 --> Family: # 72 FV at Mutated Child #1 at Generation # 32 : 2.342163355286186 FV at Mutated Child #2 at Generation # 32 : 0.9673770658483838 --> Family: # 73 FV at Mutated Child #1 at Generation # 32 : 0.7886502319126429 FV at Mutated Child #2 at Generation # 32 : 1.7518359915889334 --> Family: # 74 FV at Mutated Child #1 at Generation # 32 : 4.07764322339606 FV at Mutated Child #2 at Generation # 32 : 1.1122766350414115

Ex_1_2_3 --> Family: # 75 FV at Mutated Child #1 at Generation # 32 : 2.347184734513546 FV at Mutated Child #2 at Generation # 32 : 4.305096254192796 --> Family: # 76 FV at Mutated Child #1 at Generation # 32 : 0.6305254414849472 FV at Mutated Child #2 at Generation # 32 : 0.8580809846031968 --> Family: # 77 FV at Mutated Child #1 at Generation # 32 : 34.63644556102532 FV at Mutated Child #2 at Generation # 32 : 1.2369438988250026 --> Family: # 78 FV at Mutated Child #1 at Generation # 32 : 0.6356959009238234 FV at Mutated Child #2 at Generation # 32 : 0.8039505835852276 --> Family: # 79 FV at Mutated Child #1 at Generation # 32 : 1.1179426493544662 FV at Mutated Child #2 at Generation # 32 : 1.32922769832483 --> Family: # 80 FV at Mutated Child #1 at Generation # 32 : 398.00537200316603 FV at Mutated Child #2 at Generation # 32 : 257.50996236702616 --> **Generation:** # 33 --> Family: # 1 FV at Mutated Child #1 at Generation # 33 : 38.43111009918366 FV at Mutated Child #2 at Generation # 33 : 6.999104670135956 --> Family: # 2 FV at Mutated Child #1 at Generation # 33 : 1.5335850460280998 FV at Mutated Child #2 at Generation # 33 : 35.16107707502518 --> Family: # 3 FV at Mutated Child #1 at Generation # 33 : 161.7289609517036 FV at Mutated Child #2 at Generation # 33 : 158.58970728220268 --> Family: # 4 FV at Mutated Child #1 at Generation # 33 : 150.71294858675938 FV at Mutated Child #2 at Generation # 33 : 600.2948092944938 --> Family: # 5 FV at Mutated Child #1 at Generation # 33 : 35.63969851972251 FV at Mutated Child #2 at Generation # 33 : 4.150087045533982 --> Family: # 6 FV at Mutated Child #1 at Generation # 33 : 502.3198317513164 FV at Mutated Child #2 at Generation # 33 : 156.0512517938021 --> Family: # 7 FV at Mutated Child #1 at Generation # 33 : 27.895139794310715 FV at Mutated Child #2 at Generation # 33 : 3.9426764286303166 --> Family: # 8 FV at Mutated Child #1 at Generation # 33 : 7.160081906252712 FV at Mutated Child #2 at Generation # 33 : 3.330380251095693 --> Family: # 9

FV at Mutated Child #1 at Generation # 33 : 13.156037148381834 FV at Mutated Child #2 at Generation # 33 : 1.0487202611718263

Ex_1_2_3 --> Family: # 10 FV at Mutated Child #1 at Generation # 33 : 160.34656862839958 FV at Mutated Child #2 at Generation # 33 : 111.24941706890556 --> Family: # 11 FV at Mutated Child #1 at Generation # 33 : 4.934022635228887 FV at Mutated Child #2 at Generation # 33 : 97.17721151559272 --> Family: # 12 FV at Mutated Child #1 at Generation # 33 : 8.113683350637984 FV at Mutated Child #2 at Generation # 33 : 161.9619167689826 --> Family: # 13 FV at Mutated Child #1 at Generation # 33 : 2.263853672192799 FV at Mutated Child #2 at Generation # 33 : 1.4893696289560647 --> Family: # 14 FV at Mutated Child #1 at Generation # 33 : 533.7302164671676 FV at Mutated Child #2 at Generation # 33 : 42.08407445919512 --> Family: # 15 FV at Mutated Child #1 at Generation # 33 : 0.8895913374840283 FV at Mutated Child #2 at Generation # 33 : 161.47032804520083 --> Family: # 16 FV at Mutated Child #1 at Generation # 33 : 26.419487579917828 FV at Mutated Child #2 at Generation # 33 : 2.652305076015444 --> Family: # 17 FV at Mutated Child #1 at Generation # 33 : 8.842286917064305 FV at Mutated Child #2 at Generation # 33 : 1.7973726997100252 --> Family: # 18 FV at Mutated Child #1 at Generation # 33 : 134.71136405484955 FV at Mutated Child #2 at Generation # 33 : 8.772434683717478 --> Family: # 19 FV at Mutated Child #1 at Generation # 33 : 40.31387856320695 FV at Mutated Child #2 at Generation # 33 : 0.9387416940392744 --> Family: # 20 FV at Mutated Child #1 at Generation # 33 : 1.9497280776466819 FV at Mutated Child #2 at Generation # 33 : 32.17000837565546 --> Family: # 21 FV at Mutated Child #1 at Generation # 33 : 108.95076355462683 FV at Mutated Child #2 at Generation # 33 : 3.3422564891467372 --> Family: # 22 FV at Mutated Child #1 at Generation # 33 : 32.54193601302063 FV at Mutated Child #2 at Generation # 33 : 6.095242526193299 --> Family: # 23 FV at Mutated Child #1 at Generation # 33 : 162.16969715406356 FV at Mutated Child #2 at Generation # 33 : 9.504545191436451 --> Family: # 24 FV at Mutated Child #1 at Generation # 33 : 2.8163786224275364

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--> Family: # 25

FV at Mutated Child #2 at Generation # 33 : 23.084674427973194

```
FV at Mutated Child #1 at Generation # 33 : 2453.1484978756876
FV at Mutated Child #2 at Generation # 33 : 7.0006588032900945
--> Family: # 26
FV at Mutated Child #1 at Generation # 33 : 41.02662577449631
FV at Mutated Child #2 at Generation # 33 : 31.408117044936866
--> Family: # 27
FV at Mutated Child #1 at Generation # 33 : 2.2610315149632827
FV at Mutated Child #2 at Generation # 33 : 152.6921286918059
--> Family: # 28
FV at Mutated Child #1 at Generation # 33 : 0.877451354592566
FV at Mutated Child #2 at Generation # 33 : 6.120978443815023
--> Family: # 29
FV at Mutated Child #1 at Generation # 33 : 0.820367591710942
FV at Mutated Child #2 at Generation # 33 : 613.1342823272563
--> Family: # 30
FV at Mutated Child #1 at Generation # 33 : 144.5961966538881
FV at Mutated Child #2 at Generation # 33 : 0.6544025007744746
--> Family: # 31
FV at Mutated Child #1 at Generation # 33 : 3.2515094583649904
FV at Mutated Child #2 at Generation # 33 : 45.49921206288035
--> Family: # 32
FV at Mutated Child #1 at Generation # 33 : 140.7257413183691
FV at Mutated Child #2 at Generation # 33 : 6.858540836195337
--> Family: # 33
FV at Mutated Child #1 at Generation # 33 : 160.8515833116851
FV at Mutated Child #2 at Generation # 33 : 141.29510943122372
--> Family: # 34
FV at Mutated Child #1 at Generation # 33 : 31.928565141753044
FV at Mutated Child #2 at Generation # 33 : 6.246317846110366
--> Family: # 35
FV at Mutated Child #1 at Generation # 33 : 3.0595491564818342
FV at Mutated Child #2 at Generation # 33 : 113.86862245597678
--> Family: # 36
FV at Mutated Child #1 at Generation # 33 : 1.3572228361775132
FV at Mutated Child #2 at Generation # 33 : 161.1598348486134
--> Family: # 37
FV at Mutated Child #1 at Generation # 33 : 2441.554908506494
FV at Mutated Child #2 at Generation # 33 : 41.615127412120806
--> Family: # 38
FV at Mutated Child #1 at Generation # 33 : 0.8781786352266268
FV at Mutated Child #2 at Generation # 33 : 45.33559784798853
--> Family: # 39
FV at Mutated Child #1 at Generation # 33 : 149.9180757701977
FV at Mutated Child #2 at Generation # 33 : 8.562365258691173
--> Family: # 40
```

FV at Mutated Child #1 at Generation # 33 : 10.818497420168397 FV at Mutated Child #2 at Generation # 33 : 35.776817270190556 --> Family: # 41 FV at Mutated Child #1 at Generation # 33 : 34.83851643407102 FV at Mutated Child #2 at Generation # 33 : 2.7539982995768413 --> Family: # 42 FV at Mutated Child #1 at Generation # 33 : 4.5748594838590915 FV at Mutated Child #2 at Generation # 33 : 1.713357512090695 --> Family: # 43 FV at Mutated Child #1 at Generation # 33 : 7.631744202994972 FV at Mutated Child #2 at Generation # 33 : 4.627003699377024 --> Family: # 44 FV at Mutated Child #1 at Generation # 33 : 0.8815942355196424 FV at Mutated Child #2 at Generation # 33 : 36.418793436213925 --> Family: # 45 FV at Mutated Child #1 at Generation # 33 : 5.647680592505206 FV at Mutated Child #2 at Generation # 33 : 0.8655036053898961 --> Family: # 46 FV at Mutated Child #1 at Generation # 33 : 159.56680308686396 FV at Mutated Child #2 at Generation # 33 : 36.50443271390442 --> Family: # 47 FV at Mutated Child #1 at Generation # 33 : 96.24221406747536 FV at Mutated Child #2 at Generation # 33 : 120.28259248716732 --> Family: # 48 FV at Mutated Child #1 at Generation # 33 : 1.3380690834268223 FV at Mutated Child #2 at Generation # 33 : 5.910612801952912 --> Family: # 49 FV at Mutated Child #1 at Generation # 33 : 550.9385203819553 FV at Mutated Child #2 at Generation # 33 : 613.4252248853329 --> Family: # 50 FV at Mutated Child #1 at Generation # 33 : 22.25613003754099 FV at Mutated Child #2 at Generation # 33 : 1.8779600406282726 --> Family: # 51 FV at Mutated Child #1 at Generation # 33 : 44.866196779252995 FV at Mutated Child #2 at Generation # 33 : 1.713357512090695 --> Family: # 52 FV at Mutated Child #1 at Generation # 33 : 126.82975174727669 FV at Mutated Child #2 at Generation # 33 : 6.079446262502806 --> Family: # 53 FV at Mutated Child #1 at Generation # 33 : 0.6490172363725598 FV at Mutated Child #2 at Generation # 33 : 6.397463535620781 --> Family: # 54 FV at Mutated Child #1 at Generation # 33 : 1.8974298285453295 FV at Mutated Child #2 at Generation # 33 : 146.01598912912493 --> Family: # 55

FV at Mutated Child #1 at Generation # 33 : 11.798008948673832

FV at Mutated Child #2 at Generation # 33 : 3.219985116456895 --> Family: # 56 FV at Mutated Child #1 at Generation # 33 : 26.26447060564544 FV at Mutated Child #2 at Generation # 33 : 32.550690212019674 --> Family: # 57 FV at Mutated Child #1 at Generation # 33 : 150.4658555157629 FV at Mutated Child #2 at Generation # 33 : 8.659858803994524 --> Family: # 58 FV at Mutated Child #1 at Generation # 33 : 5.149583454775504 FV at Mutated Child #2 at Generation # 33 : 0.991538124060009 --> Family: # 59 FV at Mutated Child #1 at Generation # 33 : 2.3271111639412427 FV at Mutated Child #2 at Generation # 33 : 10.37804399260279 --> Family: # 60 FV at Mutated Child #1 at Generation # 33 : 137.650598214518 FV at Mutated Child #2 at Generation # 33 : 25.124891001608834 --> Family: # 61 FV at Mutated Child #1 at Generation # 33 : 132.18252057638864 FV at Mutated Child #2 at Generation # 33 : 2.474771550482231 --> Family: # 62 FV at Mutated Child #1 at Generation # 33 : 45.34812474669731 FV at Mutated Child #2 at Generation # 33 : 170.84207821635752 --> Family: # 63 FV at Mutated Child #1 at Generation # 33 : 496.0521765573663 FV at Mutated Child #2 at Generation # 33 : 495.8045108787956 --> Family: # 64 FV at Mutated Child #1 at Generation # 33 : 141.00572054156007 FV at Mutated Child #2 at Generation # 33 : 40.25825445034114 --> Family: # 65 FV at Mutated Child #1 at Generation # 33 : 4.785872781294906 FV at Mutated Child #2 at Generation # 33 : 2.587443626069436 --> Family: # 66 FV at Mutated Child #1 at Generation # 33 : 8.122563753904979 FV at Mutated Child #2 at Generation # 33 : 2466.361823358838 --> Family: # 67 FV at Mutated Child #1 at Generation # 33 : 33.43240494294202 FV at Mutated Child #2 at Generation # 33 : 2.8844158610104937 --> Family: # 68 FV at Mutated Child #1 at Generation # 33 : 0.988060622752499 FV at Mutated Child #2 at Generation # 33 : 589.1987932795607 --> Family: # 69 FV at Mutated Child #1 at Generation # 33 : 11.544562592346578 FV at Mutated Child #2 at Generation # 33 : 19.985516767530296 --> Family: # 70 FV at Mutated Child #1 at Generation # 33 : 2522.857841765233 FV at Mutated Child #2 at Generation # 33 : 9.119788488960603

--> Family: # 71

FV at Mutated Child #1 at Generation # 33 : 7.127704499312282 FV at Mutated Child #2 at Generation # 33 : 115.02002593803995

--> Family: # 72

FV at Mutated Child #1 at Generation # 33 : 117.00820020983025 FV at Mutated Child #2 at Generation # 33 : 3.5483608924393417

--> Family: # 73

FV at Mutated Child #1 at Generation # 33 : 10.703086311147269 FV at Mutated Child #2 at Generation # 33 : 12.060152177936196 --> Family: # 74

FV at Mutated Child #1 at Generation # 33 : 6.055562823217569
FV at Mutated Child #2 at Generation # 33 : 0.9279229830288497
--> Family: # 75

FV at Mutated Child #1 at Generation # 33 : 8.65571947911203 FV at Mutated Child #2 at Generation # 33 : 3.6767981396440526 --> Family: # 76

FV at Mutated Child #1 at Generation # 33 : 0.8301012029987221 FV at Mutated Child #2 at Generation # 33 : 39.64621456579015 --> Family: # 77

FV at Mutated Child #1 at Generation # 33 : 1.8779600406282726 FV at Mutated Child #2 at Generation # 33 : 2.587443626069436 --> Family: # 78

FV at Mutated Child #1 at Generation # 33 : 2.702911621237099 FV at Mutated Child #2 at Generation # 33 : 0.8895913374840283 --> Family: # 79

FV at Mutated Child #1 at Generation # 33 : 41.18525715707095 FV at Mutated Child #2 at Generation # 33 : 167.0407273496569 --> Family: # 80

FV at Mutated Child #1 at Generation # 33 : 40.3098908933 FV at Mutated Child #2 at Generation # 33 : 1.4065337733028214 --> Generation: # 34

--> Family: # 1

FV at Mutated Child #1 at Generation # 34 : 42.97900831133564 FV at Mutated Child #2 at Generation # 34 : 37.52875308097784 --> Family: # 2

FV at Mutated Child #1 at Generation # 34 : 9.190644825710153 FV at Mutated Child #2 at Generation # 34 : 5.759038554050491 --> Family: # 3

FV at Mutated Child #1 at Generation # 34 : 2.2241852570261855 FV at Mutated Child #2 at Generation # 34 : 1.1306977306416945 --> Family: # 4

FV at Mutated Child #1 at Generation # 34 : 472.24515440144404 FV at Mutated Child #2 at Generation # 34 : 425.1088264861862 --> Family: # 5

FV at Mutated Child #1 at Generation # 34 : 1.7300080896081904 FV at Mutated Child #2 at Generation # 34 : 0.6305254414849472

--> Family: # 6 --> Family: # 7

FV at Mutated Child #1 at Generation # 34 : 4.427136032664561 FV at Mutated Child #2 at Generation # 34 : 601.0987171152044

FV at Mutated Child #1 at Generation # 34 : 0.7907284907730565 FV at Mutated Child #2 at Generation # 34 : 7.8118341320131615 --> Family: # 8

FV at Mutated Child #1 at Generation # 34 : 10.057009261216498 FV at Mutated Child #2 at Generation # 34 : 1.7428743083345064 --> Family: # 9

FV at Mutated Child #1 at Generation # 34 : 23.157306574016275 FV at Mutated Child #2 at Generation # 34 : 0.6888563037730879 --> Family: # 10

FV at Mutated Child #1 at Generation # 34 : 30.158973159565686 FV at Mutated Child #2 at Generation # 34 : 2.926615828810155 --> Family: # 11

FV at Mutated Child #1 at Generation # 34 : 34.78761804175458 FV at Mutated Child #2 at Generation # 34 : 2393.456795059471 --> Family: # 12

FV at Mutated Child #1 at Generation # 34 : 0.6488285039952673 FV at Mutated Child #2 at Generation # 34 : 630.3707963967673 --> Family: # 13

FV at Mutated Child #1 at Generation # 34 : 3.8092355726536145 FV at Mutated Child #2 at Generation # 34 : 31.852627179397327 --> Family: # 14

FV at Mutated Child #1 at Generation # 34 : 2.1833194634456037 FV at Mutated Child #2 at Generation # 34 : 26.314233362031132 --> Family: # 15

FV at Mutated Child #1 at Generation # 34 : 4.719481605089789 FV at Mutated Child #2 at Generation # 34 : 24.201671187176657 --> Family: # 16

FV at Mutated Child #1 at Generation # 34 : 0.6667919260091678 FV at Mutated Child #2 at Generation # 34 : 0.8538307678816914 --> Family: # 17

FV at Mutated Child #1 at Generation # 34 : 0.7321884081449503 FV at Mutated Child #2 at Generation # 34 : 130.14727033483118 --> Family: # 18

FV at Mutated Child #1 at Generation # 34 : 0.684736830602864 FV at Mutated Child #2 at Generation # 34 : 0.806579765722109 --> Family: # 19

FV at Mutated Child #1 at Generation # 34 : 0.739426758655886 FV at Mutated Child #2 at Generation # 34 : 0.8905924858515162 --> Family: # 20

FV at Mutated Child #1 at Generation # 34 : 8.803248534429526 FV at Mutated Child #2 at Generation # 34 : 5.657933591791859 --> Family: # 21

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FV at Mutated Child #1 at Generation # 34 : 33.833867176452635
FV at Mutated Child #2 at Generation # 34 : 2.6227466025365764
--> Family: # 22
FV at Mutated Child #1 at Generation # 34 : 1.5185778678752886
FV at Mutated Child #2 at Generation # 34 : 2.2546533719052726
--> Family: # 23
FV at Mutated Child #1 at Generation # 34 : 589.5690794715739
FV at Mutated Child #2 at Generation # 34 : 1.533682670255931
--> Family: # 24
FV at Mutated Child #1 at Generation # 34 : 9.835474083391906
FV at Mutated Child #2 at Generation # 34 : 1.8057306554354011
--> Family: # 25
FV at Mutated Child #1 at Generation # 34 : 7.4658423551995305
FV at Mutated Child #2 at Generation # 34 : 0.9477537936454355
--> Family: # 26
FV at Mutated Child #1 at Generation # 34 : 0.8863103126188919
FV at Mutated Child #2 at Generation # 34 : 7.973519409315433
--> Family: # 27
FV at Mutated Child #1 at Generation # 34 : 157.56479845318444
FV at Mutated Child #2 at Generation # 34 : 6.12593308608943
--> Family: # 28
FV at Mutated Child #1 at Generation # 34 : 5.48244790334809
FV at Mutated Child #2 at Generation # 34 : 0.7249960883061904
--> Family: # 29
FV at Mutated Child #1 at Generation # 34 : 2.0355458962733097
FV at Mutated Child #2 at Generation # 34 : 0.6326001192960554
--> Family: # 30
FV at Mutated Child #1 at Generation # 34 : 147.18880796368873
FV at Mutated Child #2 at Generation # 34 : 20.706461345611206
--> Family: # 31
FV at Mutated Child #1 at Generation # 34 : 40.81728384841816
FV at Mutated Child #2 at Generation # 34 : 1.1771833459970555
--> Family: # 32
FV at Mutated Child #1 at Generation # 34 : 33.981768823272475
FV at Mutated Child #2 at Generation # 34 : 1.1808970657362654
--> Family: # 33
FV at Mutated Child #1 at Generation # 34 : 1.7859534625363043
FV at Mutated Child #2 at Generation # 34 : 22.190259262239003
--> Family: # 34
FV at Mutated Child #1 at Generation # 34 : 47.26319306984916
FV at Mutated Child #2 at Generation # 34 : 26.43990870672068
--> Family: # 35
FV at Mutated Child #1 at Generation # 34 : 513.0604222355598
FV at Mutated Child #2 at Generation # 34 : 26.069714376726473
--> Family: # 36
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FV at Mutated Child #1 at Generation # 34 : 16.44793084868694 FV at Mutated Child #2 at Generation # 34 : 0.5094020670365494 --> Family: # 37 FV at Mutated Child #1 at Generation # 34 : 140.82699819219377 FV at Mutated Child #2 at Generation # 34 : 0.6870868914022138 --> Family: # 38 FV at Mutated Child #1 at Generation # 34 : 581.6021763938207 FV at Mutated Child #2 at Generation # 34 : 25.294599424619516 --> Family: # 39 FV at Mutated Child #1 at Generation # 34 : 495.3458691333934 FV at Mutated Child #2 at Generation # 34 : 0.6827585528472163 --> Family: # 40 FV at Mutated Child #1 at Generation # 34 : 3.0357657536108102 FV at Mutated Child #2 at Generation # 34 : 33.62651031483138 --> Family: # 41 FV at Mutated Child #1 at Generation # 34 : 0.655056781434965 FV at Mutated Child #2 at Generation # 34 : 1.3456017142286472 --> Family: # 42 FV at Mutated Child #1 at Generation # 34 : 1.2316532002098965 FV at Mutated Child #2 at Generation # 34 : 3.541745794709306 --> Family: # 43 FV at Mutated Child #1 at Generation # 34 : 0.8174561425909014 FV at Mutated Child #2 at Generation # 34 : 15.229989910133472 --> Family: # 44 FV at Mutated Child #1 at Generation # 34 : 1.1808970657362654 FV at Mutated Child #2 at Generation # 34 : 0.6296373221274368 --> Family: # 45 FV at Mutated Child #1 at Generation # 34 : 32.048279415572935 FV at Mutated Child #2 at Generation # 34 : 0.7253660421426571 --> Family: # 46 FV at Mutated Child #1 at Generation # 34 : 17.678750154084916 FV at Mutated Child #2 at Generation # 34 : 7.4021020542041756 --> Family: # 47 FV at Mutated Child #1 at Generation # 34 : 3.877612582079017 FV at Mutated Child #2 at Generation # 34 : 7.646155240465049 --> Family: # 48 FV at Mutated Child #1 at Generation # 34 : 0.8900579474788917 FV at Mutated Child #2 at Generation # 34 : 145.14365510314676 --> Family: # 49 FV at Mutated Child #1 at Generation # 34 : 1.7919127441753462 FV at Mutated Child #2 at Generation # 34 : 2395.1041460486827 --> Family: # 50 FV at Mutated Child #1 at Generation # 34 : 4.158131511750934

FV at Mutated Child #2 at Generation # 34 : 7.4658423551995305 --> Family: # 51

FV at Mutated Child #1 at Generation # 34 : 21.937880681555438

FV at Mutated Child #2 at Generation # 34 : 4.4504414728408594 --> Family: # 52 FV at Mutated Child #1 at Generation # 34 : 2.0071232199735065 FV at Mutated Child #2 at Generation # 34 : 0.8518633555327428 --> Family: # 53 FV at Mutated Child #1 at Generation # 34 : 0.6839374167924768 FV at Mutated Child #2 at Generation # 34 : 27.704257517247445 --> Family: # 54 FV at Mutated Child #1 at Generation # 34 : 6.021411330854128 FV at Mutated Child #2 at Generation # 34 : 1.370871741122989 --> Family: # 55 FV at Mutated Child #1 at Generation # 34: 0.66521976067313 FV at Mutated Child #2 at Generation # 34 : 1.188434769729612 --> Family: # 56 FV at Mutated Child #1 at Generation # 34 : 26.12098854906568 FV at Mutated Child #2 at Generation # 34 : 4.923191750760376 --> Family: # 57 FV at Mutated Child #1 at Generation # 34 : 1.6188740366155074 FV at Mutated Child #2 at Generation # 34 : 22.979557274896614 --> Family: # 58 FV at Mutated Child #1 at Generation # 34 : 7.581614618499756 FV at Mutated Child #2 at Generation # 34 : 23.913221896582627 --> Family: # 59 FV at Mutated Child #1 at Generation # 34 : 26.813013768313102 FV at Mutated Child #2 at Generation # 34 : 15.241294848101845 --> Family: # 60 FV at Mutated Child #1 at Generation # 34 : 4.542166930270161 FV at Mutated Child #2 at Generation # 34 : 18.351557598108382 --> Family: # 61 FV at Mutated Child #1 at Generation # 34 : 1.2316532002098965 FV at Mutated Child #2 at Generation # 34 : 2.9851832103188913 --> Family: # 62 FV at Mutated Child #1 at Generation # 34 : 27.26866589161652 FV at Mutated Child #2 at Generation # 34 : 2.677067401189298 --> Family: # 63 FV at Mutated Child #1 at Generation # 34 : 17.928332583940076 FV at Mutated Child #2 at Generation # 34 : 0.6997608675489638 --> Family: # 64 FV at Mutated Child #1 at Generation # 34 : 17.14897022104793 FV at Mutated Child #2 at Generation # 34 : 576.5129151032253 --> Family: # 65 FV at Mutated Child #1 at Generation # 34 : 1946.0071400237543 FV at Mutated Child #2 at Generation # 34 : 2524.275445483308 --> Family: # 66 FV at Mutated Child #1 at Generation # 34 : 18.496248746300047

FV at Mutated Child #2 at Generation # 34 : 0.7277006961550285

--> Family: # 67 FV at Mutated Child #1 at Generation # 34 : 4.742560191789133 FV at Mutated Child #2 at Generation # 34 : 0.7173512386007287 --> Family: # 68 FV at Mutated Child #1 at Generation # 34 : 1.7814955563379693 FV at Mutated Child #2 at Generation # 34 : 5.765491449882231 --> Family: # 69 FV at Mutated Child #1 at Generation # 34 : 1.4680024718230213 FV at Mutated Child #2 at Generation # 34 : 19.095660456204236 --> Family: # 70 FV at Mutated Child #1 at Generation # 34 : 6.928299360645519 FV at Mutated Child #2 at Generation # 34 : 5.683305083937988 --> Family: # 71 FV at Mutated Child #1 at Generation # 34 : 126.111531479354 FV at Mutated Child #2 at Generation # 34 : 600.5880272505037 --> Family: # 72 FV at Mutated Child #1 at Generation # 34 : 7.553433705972561 FV at Mutated Child #2 at Generation # 34 : 144.94643002687562 --> Family: # 73 FV at Mutated Child #1 at Generation # 34 : 1.1263485034176186 FV at Mutated Child #2 at Generation # 34 : 2.0355458962733097 --> Family: # 74 FV at Mutated Child #1 at Generation # 34 : 154.9292046863822 FV at Mutated Child #2 at Generation # 34 : 21.011505669890195 --> Family: # 75 FV at Mutated Child #1 at Generation # 34 : 13.536025036154463 FV at Mutated Child #2 at Generation # 34 : 561.6401430485439 --> Family: # 76 FV at Mutated Child #1 at Generation # 34 : 13.192122285655037 FV at Mutated Child #2 at Generation # 34 : 2.4998241330788833 --> Family: # 77 FV at Mutated Child #1 at Generation # 34 : 3.111721457910074 FV at Mutated Child #2 at Generation # 34 : 70.35601638789129 --> Family: # 78 FV at Mutated Child #1 at Generation # 34 : 118.8600650489267 FV at Mutated Child #2 at Generation # 34 : 12.045225535921174 --> Family: # 79 FV at Mutated Child #1 at Generation # 34 : 6.96426663514666 FV at Mutated Child #2 at Generation # 34 : 43.41145441279996 --> Family: # 80 FV at Mutated Child #1 at Generation # 34 : 506.38822968216357 FV at Mutated Child #2 at Generation # 34 : 374.4346348214175 --> Generation: # 35 --> Family: # 1 FV at Mutated Child #1 at Generation # 35 : 27.82159420595835 FV at Mutated Child #2 at Generation # 35 : 138.98834500182426

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--> Family: # 2 FV at Mutated Child #1 at Generation # 35 : 1.5335850460280998 FV at Mutated Child #2 at Generation # 35 : 613.6816090210434 --> Family: # 3 FV at Mutated Child #1 at Generation # 35 : 5.186779418320196 FV at Mutated Child #2 at Generation # 35 : 18.339774332975466 --> Family: # 4 FV at Mutated Child #1 at Generation # 35 : 9.469424850139486 FV at Mutated Child #2 at Generation # 35 : 8.002190935469944 --> Family: # 5 FV at Mutated Child #1 at Generation # 35 : 4.18519708515722 FV at Mutated Child #2 at Generation # 35 : 138.10450696378825 --> Family: # 6 FV at Mutated Child #1 at Generation # 35 : 588.5526211195818 FV at Mutated Child #2 at Generation # 35 : 133.91318415468183 --> Family: # 7 FV at Mutated Child #1 at Generation # 35 : 0.830870498475121 FV at Mutated Child #2 at Generation # 35 : 0.9747086261052125 --> Family: # 8 FV at Mutated Child #1 at Generation # 35 : 2337.4598957841713 FV at Mutated Child #2 at Generation # 35 : 2111.785444943425 --> Family: # 9 FV at Mutated Child #1 at Generation # 35 : 11.014317943193468 FV at Mutated Child #2 at Generation # 35 : 12.444917625975053 --> Family: # 10 FV at Mutated Child #1 at Generation # 35 : 14.250742001249757 FV at Mutated Child #2 at Generation # 35 : 2.1517409969209464 --> Family: # 11 FV at Mutated Child #1 at Generation # 35 : 10.244690511352374 FV at Mutated Child #2 at Generation # 35 : 1.37743104075068 --> Family: # 12 FV at Mutated Child #1 at Generation # 35 : 512.9468248038581 FV at Mutated Child #2 at Generation # 35 : 32.53580363185668 --> Family: # 13 FV at Mutated Child #1 at Generation # 35 : 6.178001700612508 FV at Mutated Child #2 at Generation # 35 : 4.30762036005637 --> Family: # 14 FV at Mutated Child #1 at Generation # 35 : 12.197958831408974 FV at Mutated Child #2 at Generation # 35 : 1.1282508786120444 --> Family: # 15 FV at Mutated Child #1 at Generation # 35 : 518.8612554019949 FV at Mutated Child #2 at Generation # 35 : 92.0699353416993 --> Family: # 16 FV at Mutated Child #1 at Generation # 35 : 1.7725579726404983 FV at Mutated Child #2 at Generation # 35 : 0.8907509094064434

--> Family: # 17

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FV at Mutated Child #1 at Generation # 35 : 1.8073746087209217
FV at Mutated Child #2 at Generation # 35 : 1.8179000802235654
--> Family: # 18
FV at Mutated Child #1 at Generation # 35 : 128.56772443316947
FV at Mutated Child #2 at Generation # 35 : 3.561161815714212
--> Family: # 19
FV at Mutated Child #1 at Generation # 35 : 0.8337765951721297
FV at Mutated Child #2 at Generation # 35 : 0.9387416940392744
--> Family: # 20
FV at Mutated Child #1 at Generation # 35 : 8.097524142400598
FV at Mutated Child #2 at Generation # 35 : 568.2524933369737
--> Family: # 21
FV at Mutated Child #1 at Generation # 35 : 13.448203580632539
FV at Mutated Child #2 at Generation # 35 : 35.20009064316144
--> Family: # 22
FV at Mutated Child #1 at Generation # 35 : 616.1022707957433
FV at Mutated Child #2 at Generation # 35 : 612.8209320575489
--> Family: # 23
FV at Mutated Child #1 at Generation # 35 : 1.8041555078146319
FV at Mutated Child #2 at Generation # 35 : 6.754610937505584
--> Family: # 24
FV at Mutated Child #1 at Generation # 35 : 2.0684871966561356
FV at Mutated Child #2 at Generation # 35 : 35.207944390014504
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--> Family: # 27
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FV at Mutated Child #2 at Generation # 35 : 18.263785491801613
--> Family: # 29
FV at Mutated Child #1 at Generation # 35 : 22.769101930488628
FV at Mutated Child #2 at Generation # 35 : 84.91212266094061
--> Family: # 30
FV at Mutated Child #1 at Generation # 35 : 144.35479248596437
FV at Mutated Child #2 at Generation # 35 : 4.30762036005637
--> Family: # 31
FV at Mutated Child #1 at Generation # 35 : 10.58478640253161
FV at Mutated Child #2 at Generation # 35 : 0.8126611449656267
--> Family: # 32
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FV at Mutated Child #1 at Generation # 35 : 1.109157545382489 FV at Mutated Child #2 at Generation # 35 : 2255.651966118688 --> Family: # 33 FV at Mutated Child #1 at Generation # 35 : 3.841770320932798 FV at Mutated Child #2 at Generation # 35 : 12.444917625975053 --> Family: # 34 FV at Mutated Child #1 at Generation # 35 : 510.4081358885801 FV at Mutated Child #2 at Generation # 35 : 58.90956194445309 --> Family: # 35 FV at Mutated Child #1 at Generation # 35 : 2322.201208172216 FV at Mutated Child #2 at Generation # 35 : 2271.8599854930308 --> Family: # 36 FV at Mutated Child #1 at Generation # 35 : 23.433184966247364 FV at Mutated Child #2 at Generation # 35 : 1.3646258851402213 --> Family: # 37 FV at Mutated Child #1 at Generation # 35 : 6.022870346322743 FV at Mutated Child #2 at Generation # 35 : 1.6916459844368013 --> Family: # 38 FV at Mutated Child #1 at Generation # 35 : 34.5548931887392 FV at Mutated Child #2 at Generation # 35 : 1.4831230778492985 --> Family: # 39 FV at Mutated Child #1 at Generation # 35 : 127.9216238306386 FV at Mutated Child #2 at Generation # 35 : 13.50336778779401 --> Family: # 40 FV at Mutated Child #1 at Generation # 35 : 28.966978288001904 FV at Mutated Child #2 at Generation # 35 : 7.101931314653511 --> Family: # 41 FV at Mutated Child #1 at Generation # 35 : 8.78581524757397 FV at Mutated Child #2 at Generation # 35 : 2.023218418161613 --> Family: # 42 FV at Mutated Child #1 at Generation # 35 : 42.70315775373125 FV at Mutated Child #2 at Generation # 35 : 18.061094714657155 --> Family: # 43 FV at Mutated Child #1 at Generation # 35 : 128.51349321283658 FV at Mutated Child #2 at Generation # 35 : 4.116806363239487 --> Family: # 44 FV at Mutated Child #1 at Generation # 35 : 5.956996585079529 FV at Mutated Child #2 at Generation # 35 : 2.160078368566583 --> Family: # 45 FV at Mutated Child #1 at Generation # 35 : 97.6920871563437 FV at Mutated Child #2 at Generation # 35 : 3.798960002459884 --> Family: # 46 FV at Mutated Child #1 at Generation # 35 : 10.858269679053125

FV at Mutated Child #2 at Generation # 35 : 11.896025930127003 --> Family: # 47

FV at Mutated Child #1 at Generation # 35 : 8.09802864494859

FV at Mutated Child #2 at Generation # 35 : 10.320344571326217 --> Family: # 48 FV at Mutated Child #1 at Generation # 35 : 1.0777321231468533 FV at Mutated Child #2 at Generation # 35 : 8.612187976262902 --> Family: # 49 FV at Mutated Child #1 at Generation # 35 : 2.937476100051185 FV at Mutated Child #2 at Generation # 35 : 9.211501482589894 --> Family: # 50 FV at Mutated Child #1 at Generation # 35 : 169.4049805181182 FV at Mutated Child #2 at Generation # 35 : 1.8979373461061733 --> Family: # 51 FV at Mutated Child #1 at Generation # 35 : 1.182267117972134 FV at Mutated Child #2 at Generation # 35 : 4.184669297693867 --> Family: # 52 FV at Mutated Child #1 at Generation # 35 : 2.0730919987149923 FV at Mutated Child #2 at Generation # 35 : 8.75794347467262 --> Family: # 53 FV at Mutated Child #1 at Generation # 35 : 8.345363257237842 FV at Mutated Child #2 at Generation # 35 : 4.930073707420085 --> Family: # 54 FV at Mutated Child #1 at Generation # 35 : 3.2515094583649904 FV at Mutated Child #2 at Generation # 35 : 23.270163918220323 --> Family: # 55 FV at Mutated Child #1 at Generation # 35 : 1.729132925555398 FV at Mutated Child #2 at Generation # 35 : 3.2515094583649904 --> Family: # 56 FV at Mutated Child #1 at Generation # 35 : 87.55499442187681 FV at Mutated Child #2 at Generation # 35 : 5.3475207432942655 --> Family: # 57 FV at Mutated Child #1 at Generation # 35 : 604.0186395712974 FV at Mutated Child #2 at Generation # 35 : 1.5185809836702955 --> Family: # 58 FV at Mutated Child #1 at Generation # 35 : 1.5414057265871655 FV at Mutated Child #2 at Generation # 35 : 393.43474509402046 --> Family: # 59 FV at Mutated Child #1 at Generation # 35 : 9.99315946423642 FV at Mutated Child #2 at Generation # 35 : 1.5705440465619978 --> Family: # 60 FV at Mutated Child #1 at Generation # 35 : 4.969575455112987 FV at Mutated Child #2 at Generation # 35 : 3.503991563793644 --> Family: # 61 FV at Mutated Child #1 at Generation # 35 : 10.362551172274411 FV at Mutated Child #2 at Generation # 35 : 39.19031466034303 --> Family: # 62 FV at Mutated Child #1 at Generation # 35 : 35.49548238048977 FV at Mutated Child #2 at Generation # 35 : 613.7607662669733

--> Family: # 63 FV at Mutated Child #1 at Generation # 35 : 0.8758135910702316 FV at Mutated Child #2 at Generation # 35 : 3.0866981271570886 --> Family: # 64 FV at Mutated Child #1 at Generation # 35 : 0.7377899088760034 FV at Mutated Child #2 at Generation # 35 : 0.810856789007459 --> Family: # 65 FV at Mutated Child #1 at Generation # 35 : 23.975268750722236 FV at Mutated Child #2 at Generation # 35 : 49.17414307768397

--> Family: # 66

FV at Mutated Child #1 at Generation # 35 : 174.88573265841296 FV at Mutated Child #2 at Generation # 35 : 106.89378977416523 --> Family: # 67

FV at Mutated Child #1 at Generation # 35 : 1.476768588949657 FV at Mutated Child #2 at Generation # 35 : 131.6231190368519 --> Family: # 68

FV at Mutated Child #1 at Generation # 35 : 612.8209320575489 FV at Mutated Child #2 at Generation # 35 : 8.089751378921989 --> Family: # 69

FV at Mutated Child #1 at Generation # 35 : 1.565486539794728 FV at Mutated Child #2 at Generation # 35 : 2.7539982995768413 --> Family: # 70

FV at Mutated Child #1 at Generation # 35 : 8.424769902542996 FV at Mutated Child #2 at Generation # 35 : 28.625479951515395 --> Family: # 71

FV at Mutated Child #1 at Generation # 35 : 4.3248627385947565 FV at Mutated Child #2 at Generation # 35 : 1.5049402841220614 --> Family: # 72

FV at Mutated Child #1 at Generation # 35 : 629.904072537532 FV at Mutated Child #2 at Generation # 35 : 565.3213572493917 --> Family: # 73

FV at Mutated Child #1 at Generation # 35 : 121.57624751722496 FV at Mutated Child #2 at Generation # 35 : 3.474830371998776 --> Family: # 74

FV at Mutated Child #1 at Generation # 35 : 149.6721777805572 FV at Mutated Child #2 at Generation # 35 : 5.243429247907038 --> Family: # 75

FV at Mutated Child #1 at Generation # 35 : 33.77914079536307 FV at Mutated Child #2 at Generation # 35 : 36.4649635825323 --> Family: # 76

FV at Mutated Child #1 at Generation # 35 : 10.419422776470807 FV at Mutated Child #2 at Generation # 35 : 9.646108413914778 --> Family: # 77

FV at Mutated Child #1 at Generation # 35 : 33.50775651089229 FV at Mutated Child #2 at Generation # 35 : 612.4730667096741 --> Family: # 78

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FV at Mutated Child #2 at Generation # 35 : 13.47397572264072
--> Family: # 79
FV at Mutated Child #1 at Generation # 35 : 4.369835714858843
FV at Mutated Child #2 at Generation # 35 : 26.108042699111582
--> Family: # 80
FV at Mutated Child #1 at Generation # 35 : 7.097631399943891
FV at Mutated Child #2 at Generation # 35 : 6.75487106436855
--> Generation: # 36
--> Family: # 1
FV at Mutated Child #1 at Generation # 36 : 0.7152552382660181
FV at Mutated Child #2 at Generation # 36 : 21.481564373180127
--> Family: # 2
FV at Mutated Child #1 at Generation # 36 : 1.6764683920098138
FV at Mutated Child #2 at Generation # 36 : 21.392331292472594
--> Family: # 3
FV at Mutated Child #1 at Generation # 36 : 1.7859534625363043
FV at Mutated Child #2 at Generation # 36 : 7.551536207331683
--> Family: # 4
FV at Mutated Child #1 at Generation # 36 : 3.9592560914812345
FV at Mutated Child #2 at Generation # 36 : 0.9788171536578929
--> Family: # 5
FV at Mutated Child #1 at Generation # 36 : 508.0808819491104
FV at Mutated Child #2 at Generation # 36 : 0.966961145295738
--> Family: # 6
FV at Mutated Child #1 at Generation # 36 : 1.3116223754442538
FV at Mutated Child #2 at Generation # 36 : 90.0544458182116
--> Family: # 7
FV at Mutated Child #1 at Generation # 36 : 29.025722822006433
FV at Mutated Child #2 at Generation # 36 : 0.6866940270927102
--> Family: # 8
FV at Mutated Child #1 at Generation # 36 : 18.529627182935528
FV at Mutated Child #2 at Generation # 36 : 0.6665647738404769
--> Family: # 9
FV at Mutated Child #1 at Generation # 36 : 483.70908881486156
FV at Mutated Child #2 at Generation # 36 : 19.58879148374504
--> Family: # 10
FV at Mutated Child #1 at Generation # 36 : 115.24341612193355
FV at Mutated Child #2 at Generation # 36 : 28.0226625577239
--> Family: # 11
FV at Mutated Child #1 at Generation # 36 : 0.7156793608864761
FV at Mutated Child #2 at Generation # 36 : 2.5156513202333137
--> Family: # 12
FV at Mutated Child #1 at Generation # 36 : 75.76412949301243
FV at Mutated Child #2 at Generation # 36 : 2.9560030248969524
--> Family: # 13
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FV at Mutated Child #1 at Generation # 36 : 3.8269055679708726
FV at Mutated Child #2 at Generation # 36 : 2.7683312584608926
--> Family: # 14
FV at Mutated Child #1 at Generation # 36 : 1.1024351699108201
FV at Mutated Child #2 at Generation # 36 : 0.6483960271413589
--> Family: # 15
FV at Mutated Child #1 at Generation # 36 : 0.6995502994227071
FV at Mutated Child #2 at Generation # 36 : 31.32468797528527
--> Family: # 16
FV at Mutated Child #1 at Generation # 36 : 0.7539133846443744
FV at Mutated Child #2 at Generation # 36 : 4.342604130590605
--> Family: # 17
FV at Mutated Child #1 at Generation # 36 : 0.851686653690088
FV at Mutated Child #2 at Generation # 36 : 598.6651631884497
--> Family: # 18
FV at Mutated Child #1 at Generation # 36 : 2524.9025008440804
FV at Mutated Child #2 at Generation # 36 : 4.324295919889639
--> Family: # 19
FV at Mutated Child #1 at Generation # 36 : 1.9454116527542382
FV at Mutated Child #2 at Generation # 36 : 130.95671501032913
--> Family: # 20
FV at Mutated Child #1 at Generation # 36 : 27.046450558832014
FV at Mutated Child #2 at Generation # 36 : 0.7768346412766152
--> Family: # 21
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--> Family: # 22
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FV at Mutated Child #2 at Generation # 36 : 121.44815831209998
--> Family: # 23
FV at Mutated Child #1 at Generation # 36 : 5.657933591791859
FV at Mutated Child #2 at Generation # 36 : 2.8287029550121687
--> Family: # 24
FV at Mutated Child #1 at Generation # 36 : 5.037914196245677
FV at Mutated Child #2 at Generation # 36 : 3.2664915158625245
--> Family: # 25
FV at Mutated Child #1 at Generation # 36 : 126.04091693359935
FV at Mutated Child #2 at Generation # 36 : 0.7265423385240877
--> Family: # 26
FV at Mutated Child #1 at Generation # 36 : 34.399068540995174
FV at Mutated Child #2 at Generation # 36 : 130.4542865768447
--> Family: # 27
FV at Mutated Child #1 at Generation # 36 : 140.08607866600238
FV at Mutated Child #2 at Generation # 36 : 5.9900883754520615
--> Family: # 28
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FV at Mutated Child #1 at Generation # 36 : 1.0934436634509996 FV at Mutated Child #2 at Generation # 36 : 4.936796384773257 --> Family: # 29 FV at Mutated Child #1 at Generation # 36 : 19.015348284046738 FV at Mutated Child #2 at Generation # 36 : 3.554217368842213 --> Family: # 30 FV at Mutated Child #1 at Generation # 36 : 28.076073546744936 FV at Mutated Child #2 at Generation # 36 : 639.4162221961743 --> Family: # 31 FV at Mutated Child #1 at Generation # 36 : 343.393430600636 FV at Mutated Child #2 at Generation # 36 : 7.981155278487255 --> Family: # 32 FV at Mutated Child #1 at Generation # 36 : 5.842812386320686 FV at Mutated Child #2 at Generation # 36 : 2.7533534720276207 --> Family: # 33 FV at Mutated Child #1 at Generation # 36 : 1.5044531444676426 FV at Mutated Child #2 at Generation # 36 : 114.98058117868541 --> Family: # 34 FV at Mutated Child #1 at Generation # 36 : 2.074132742536458 FV at Mutated Child #2 at Generation # 36 : 132.57989844388453 --> Family: # 35 FV at Mutated Child #1 at Generation # 36 : 4.542166930270161 FV at Mutated Child #2 at Generation # 36 : 591.3480052539712 --> Family: # 36 FV at Mutated Child #1 at Generation # 36 : 2.9653328452317083 FV at Mutated Child #2 at Generation # 36 : 1.5655623113200263 --> Family: # 37 FV at Mutated Child #1 at Generation # 36 : 578.744851863028 FV at Mutated Child #2 at Generation # 36 : 6.122068490365553 --> Family: # 38 FV at Mutated Child #1 at Generation # 36 : 27.60439198770026 FV at Mutated Child #2 at Generation # 36 : 401.744764028053 --> Family: # 39 FV at Mutated Child #1 at Generation # 36 : 1.4322974239442394 FV at Mutated Child #2 at Generation # 36 : 0.675258510025248 --> Family: # 40 FV at Mutated Child #1 at Generation # 36 : 2.1782511439348937 FV at Mutated Child #2 at Generation # 36 : 109.56599913671482 --> Family: # 41 FV at Mutated Child #1 at Generation # 36 : 8.615652625825641 FV at Mutated Child #2 at Generation # 36 : 4.498382686006943 --> Family: # 42 FV at Mutated Child #1 at Generation # 36 : 26.02453271605178 FV at Mutated Child #2 at Generation # 36 : 0.6241086986071667 --> Family: # 43

FV at Mutated Child #1 at Generation # 36 : 2.972958240556798

FV at Mutated Child #2 at Generation # 36 : 0.7816280685374403 --> Family: # 44 FV at Mutated Child #1 at Generation # 36 : 101.12972254802692 FV at Mutated Child #2 at Generation # 36 : 2454.920978624326 --> Family: # 45 FV at Mutated Child #1 at Generation # 36 : 600.52176515713 FV at Mutated Child #2 at Generation # 36 : 33.693312075308896 --> Family: # 46 FV at Mutated Child #1 at Generation # 36 : 51.9468583814445 FV at Mutated Child #2 at Generation # 36 : 16.686255927546718 --> Family: # 47 FV at Mutated Child #1 at Generation # 36 : 1.1294786209315417 FV at Mutated Child #2 at Generation # 36 : 595.9114875007588 --> Family: # 48 FV at Mutated Child #1 at Generation # 36 : 2.4762768639685735 FV at Mutated Child #2 at Generation # 36 : 26.702051050873884 --> Family: # 49 FV at Mutated Child #1 at Generation # 36 : 4.436629015991107 FV at Mutated Child #2 at Generation # 36 : 8.008250908738152 --> Family: # 50 FV at Mutated Child #1 at Generation # 36 : 96.5485488228618 FV at Mutated Child #2 at Generation # 36 : 5.4948178834679515 --> Family: # 51 FV at Mutated Child #1 at Generation # 36 : 548.8593738549902 FV at Mutated Child #2 at Generation # 36 : 2.1521278167191835 --> Family: # 52 FV at Mutated Child #1 at Generation # 36 : 25.713982664079417 FV at Mutated Child #2 at Generation # 36 : 5.006053001137926 --> Family: # 53 FV at Mutated Child #1 at Generation # 36 : 1978.5192653022189 FV at Mutated Child #2 at Generation # 36 : 1960.3019119125022 --> Family: # 54 FV at Mutated Child #1 at Generation # 36 : 0.6471819328834709 FV at Mutated Child #2 at Generation # 36 : 2.664528030279166 --> Family: # 55 FV at Mutated Child #1 at Generation # 36 : 7.981155278487255 FV at Mutated Child #2 at Generation # 36 : 0.6559312014203265 --> Family: # 56 FV at Mutated Child #1 at Generation # 36 : 465.41098632173265 FV at Mutated Child #2 at Generation # 36 : 471.12764831637287 --> Family: # 57 FV at Mutated Child #1 at Generation # 36 : 129.6824271520677 FV at Mutated Child #2 at Generation # 36 : 2229.9649801566943 --> Family: # 58 FV at Mutated Child #1 at Generation # 36 : 27.297228112622605 FV at Mutated Child #2 at Generation # 36 : 6.481769058887578

--> Family: # 59

FV at Mutated Child #1 at Generation # 36 : 4.6788603791950765 FV at Mutated Child #2 at Generation # 36 : 0.7616663001747217 --> Family: # 60

FV at Mutated Child #1 at Generation # 36 : 5.462328362559991 FV at Mutated Child #2 at Generation # 36 : 1.3998872618559326 --> Family: # 61

FV at Mutated Child #1 at Generation # 36 : 595.67681110173 FV at Mutated Child #2 at Generation # 36 : 463.1538669121839 --> Family: # 62

FV at Mutated Child #1 at Generation # 36 : 2.41750767407245 FV at Mutated Child #2 at Generation # 36 : 3.969546964266263 --> Family: # 63

FV at Mutated Child #1 at Generation # 36 : 0.9416140383852762 FV at Mutated Child #2 at Generation # 36 : 0.7062571418378579 --> Family: # 64

FV at Mutated Child #1 at Generation # 36 : 3.2131855444673487 FV at Mutated Child #2 at Generation # 36 : 2.272742583743337 --> Family: # 65

FV at Mutated Child #1 at Generation # 36 : 4.44559899510894 FV at Mutated Child #2 at Generation # 36 : 6.904995103254565 --> Family: # 66

FV at Mutated Child #1 at Generation # 36 : 6.7837535547625745 FV at Mutated Child #2 at Generation # 36 : 2524.9025008440804

--> Family: # 67

FV at Mutated Child #1 at Generation # 36 : 3.4389610458915394 FV at Mutated Child #2 at Generation # 36 : 603.4008668983546 --> Family: # 68

FV at Mutated Child #1 at Generation # 36 : 23.76575156556891 FV at Mutated Child #2 at Generation # 36 : 0.655056781434965 --> Family: # 69

FV at Mutated Child #1 at Generation # 36 : 3.0595491564818342 FV at Mutated Child #2 at Generation # 36 : 1.6287224460968825 --> Family: # 70

FV at Mutated Child #1 at Generation # 36 : 1499.9712120000095 FV at Mutated Child #2 at Generation # 36 : 0.7380736721794168 --> Family: # 71

FV at Mutated Child #1 at Generation # 36 : 0.7066820975504007 FV at Mutated Child #2 at Generation # 36 : 14.2880948982296 --> Family: # 72

FV at Mutated Child #1 at Generation # 36 : 19.970794441942004 FV at Mutated Child #2 at Generation # 36 : 27.695541939232097 --> Family: # 73

FV at Mutated Child #1 at Generation # 36 : 0.7097803608986489 FV at Mutated Child #2 at Generation # 36 : 127.23767307606408 --> Family: # 74

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FV at Mutated Child #1 at Generation # 36 : 1.5532808233997812
FV at Mutated Child #2 at Generation # 36 : 9.868849829653914
--> Family: # 75
FV at Mutated Child #1 at Generation # 36 : 7.200630902640198
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--> Family: # 76
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FV at Mutated Child #2 at Generation # 36 : 0.7201020869000858
--> Family: # 77
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--> Family: # 79
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--> Family: # 80
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FV at Mutated Child #2 at Generation # 36 : 89.37857769961553
--> Generation: # 37
--> Family: # 1
FV at Mutated Child #1 at Generation # 37 : 8.998222312883927
FV at Mutated Child #2 at Generation # 37 : 27.12153555153817
--> Family: # 2
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FV at Mutated Child #2 at Generation # 37 : 39.526401011848364
--> Family: # 3
FV at Mutated Child #1 at Generation # 37 : 1.2686603325221064
FV at Mutated Child #2 at Generation # 37 : 5.4539760607127725
--> Family: # 4
FV at Mutated Child #1 at Generation # 37 : 396.13679912443735
FV at Mutated Child #2 at Generation # 37 : 452.6229740137582
--> Family: # 5
FV at Mutated Child #1 at Generation # 37 : 14.773576117475145
FV at Mutated Child #2 at Generation # 37 : 1.399478494399483
--> Family: # 6
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--> Family: # 7
FV at Mutated Child #1 at Generation # 37 : 20.813315590527314
FV at Mutated Child #2 at Generation # 37 : 1.667264435908745
--> Family: # 8
FV at Mutated Child #1 at Generation # 37 : 20.462167228781343
FV at Mutated Child #2 at Generation # 37 : 567.9836187790376
--> Family: # 9
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FV at Mutated Child #1 at Generation # 37 : 41.80640801764642
FV at Mutated Child #2 at Generation # 37 : 41.80640801764642
--> Family: # 10
FV at Mutated Child #1 at Generation # 37 : 5.367210839910428
FV at Mutated Child #2 at Generation # 37 : 0.8579943184031148
--> Family: # 11
FV at Mutated Child #1 at Generation # 37 : 1.2433955447720362
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FV at Mutated Child #1 at Generation # 37 : 33.663550466198295
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FV at Mutated Child #2 at Generation # 37 : 2.8787145349068104
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FV at Mutated Child #2 at Generation # 37 : 3.1629487262520875
--> Family: # 16
FV at Mutated Child #1 at Generation # 37 : 166.96233645554693
FV at Mutated Child #2 at Generation # 37 : 553.7493350306685
--> Family: # 17
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FV at Mutated Child #2 at Generation # 37 : 4.231454206972965
--> Family: # 18
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--> Family: # 19
FV at Mutated Child #1 at Generation # 37 : 1.615143065419267
FV at Mutated Child #2 at Generation # 37 : 153.5218541579962
--> Family: # 20
FV at Mutated Child #1 at Generation # 37 : 35.6549330026987
FV at Mutated Child #2 at Generation # 37 : 8.927725448308863
--> Family: # 21
FV at Mutated Child #1 at Generation # 37 : 29.595169148543153
FV at Mutated Child #2 at Generation # 37 : 3.5727563443224177
--> Family: # 22
FV at Mutated Child #1 at Generation # 37 : 25.980433157364015
FV at Mutated Child #2 at Generation # 37 : 17.214189214841998
--> Family: # 23
FV at Mutated Child #1 at Generation # 37 : 40.37279365814377
FV at Mutated Child #2 at Generation # 37 : 31.703609023061336
--> Family: # 24
```

FV at Mutated Child #1 at Generation # 37 : 39.838448252479495 FV at Mutated Child #2 at Generation # 37 : 165.44412849850391 --> Family: # 25 FV at Mutated Child #1 at Generation # 37 : 1.399478494399483 FV at Mutated Child #2 at Generation # 37 : 5.306136570885222 --> Family: # 26 FV at Mutated Child #1 at Generation # 37 : 1.2068431026737678 FV at Mutated Child #2 at Generation # 37 : 1.7128276719312003 --> Family: # 27 FV at Mutated Child #1 at Generation # 37 : 1.0802613576372215 FV at Mutated Child #2 at Generation # 37 : 1.6399090760493409 --> Family: # 28 FV at Mutated Child #1 at Generation # 37 : 2.160078368566583 FV at Mutated Child #2 at Generation # 37 : 1.7734593973627306 --> Family: # 29 FV at Mutated Child #1 at Generation # 37 : 561.1422311013193 FV at Mutated Child #2 at Generation # 37 : 44.475968268289286 --> Family: # 30 FV at Mutated Child #1 at Generation # 37 : 4.556429940215942 FV at Mutated Child #2 at Generation # 37 : 0.9855887634460108 --> Family: # 31 FV at Mutated Child #1 at Generation # 37 : 10.193596817845227 FV at Mutated Child #2 at Generation # 37 : 1995.043302598203 --> Family: # 32 FV at Mutated Child #1 at Generation # 37 : 544.1804976966179 FV at Mutated Child #2 at Generation # 37 : 1.0487202611718263 --> Family: # 33 FV at Mutated Child #1 at Generation # 37 : 1.0531406008617608 FV at Mutated Child #2 at Generation # 37 : 578.4999902675071 --> Family: # 34 FV at Mutated Child #1 at Generation # 37 : 1.7921531385168419 FV at Mutated Child #2 at Generation # 37 : 7.250792367503276 --> Family: # 35 FV at Mutated Child #1 at Generation # 37 : 2514.652147871416 FV at Mutated Child #2 at Generation # 37 : 2.830044153460676 --> Family: # 36 FV at Mutated Child #1 at Generation # 37 : 2.6832450637101743 FV at Mutated Child #2 at Generation # 37 : 3.3137013214482236 --> Family: # 37 FV at Mutated Child #1 at Generation # 37 : 13.456368862286126 FV at Mutated Child #2 at Generation # 37 : 10.825211517167883 --> Family: # 38 FV at Mutated Child #1 at Generation # 37 : 2.202296215725041 FV at Mutated Child #2 at Generation # 37 : 0.8781786352266268 --> Family: # 39

FV at Mutated Child #1 at Generation # 37 : 141.1071718423654

FV at Mutated Child #2 at Generation # 37 : 8.702880546367483 --> Family: # 40 FV at Mutated Child #1 at Generation # 37 : 35.98184204228852 FV at Mutated Child #2 at Generation # 37 : 2470.920429233994 --> Family: # 41 FV at Mutated Child #1 at Generation # 37 : 12.751144446685355 FV at Mutated Child #2 at Generation # 37 : 598.7382813451028 --> Family: # 42 FV at Mutated Child #1 at Generation # 37 : 33.69475195535714 FV at Mutated Child #2 at Generation # 37 : 8.424769902542996 --> Family: # 43 FV at Mutated Child #1 at Generation # 37 : 150.09310173952642 FV at Mutated Child #2 at Generation # 37 : 27.895139794310715 --> Family: # 44 FV at Mutated Child #1 at Generation # 37 : 1.0344612215707125 FV at Mutated Child #2 at Generation # 37 : 630.4664510379777 --> Family: # 45 FV at Mutated Child #1 at Generation # 37 : 9.793362158997297 FV at Mutated Child #2 at Generation # 37 : 11.45878535284541 --> Family: # 46 FV at Mutated Child #1 at Generation # 37 : 3.240206576170289 FV at Mutated Child #2 at Generation # 37 : 6.815616908641969 --> Family: # 47 FV at Mutated Child #1 at Generation # 37 : 5.158196743003217 FV at Mutated Child #2 at Generation # 37 : 41.926856615074485 --> Family: # 48 FV at Mutated Child #1 at Generation # 37 : 10.825211517167883 FV at Mutated Child #2 at Generation # 37 : 10.825211517167883 --> Family: # 49 FV at Mutated Child #1 at Generation # 37 : 12.196632864283725 FV at Mutated Child #2 at Generation # 37 : 3.3982994279680265 --> Family: # 50 FV at Mutated Child #1 at Generation # 37 : 123.41377986488355 FV at Mutated Child #2 at Generation # 37 : 23.601593474428817 --> Family: # 51 FV at Mutated Child #1 at Generation # 37 : 5.38962968468151 FV at Mutated Child #2 at Generation # 37 : 2.2837657122395165 --> Family: # 52 FV at Mutated Child #1 at Generation # 37 : 162.83300939350048 FV at Mutated Child #2 at Generation # 37 : 12.307489082842539 --> Family: # 53 FV at Mutated Child #1 at Generation # 37 : 1.2298467125094532 FV at Mutated Child #2 at Generation # 37 : 149.02565733581864 --> Family: # 54 FV at Mutated Child #1 at Generation # 37 : 3.0445525339668547

FV at Mutated Child #2 at Generation # 37 : 4.6967310911654465

--> Family: # 55 FV at Mutated Child #1 at Generation # 37 : 5.452110170340649 FV at Mutated Child #2 at Generation # 37 : 4.208987192055072 --> Family: # 56 FV at Mutated Child #1 at Generation # 37 : 13.380712411705407 FV at Mutated Child #2 at Generation # 37 : 10.833760370553225 --> Family: # 57 FV at Mutated Child #1 at Generation # 37 : 1.3646258851402213 FV at Mutated Child #2 at Generation # 37 : 118.90384691422419 --> Family: # 58 FV at Mutated Child #1 at Generation # 37 : 3.980172218797318

FV at Mutated Child #2 at Generation # 37 : 2.862363873352664 --> Family: # 59

FV at Mutated Child #1 at Generation # 37 : 41.05418345801263 FV at Mutated Child #2 at Generation # 37 : 5.035764211827786 --> Family: # 60

FV at Mutated Child #1 at Generation # 37 : 10.68994362688471 FV at Mutated Child #2 at Generation # 37 : 12.601931610248926 --> Family: # 61

FV at Mutated Child #1 at Generation # 37 : 527.4216411797261 FV at Mutated Child #2 at Generation # 37 : 513.1681932027053 --> Family: # 62

FV at Mutated Child #1 at Generation # 37 : 559.2677289728251 FV at Mutated Child #2 at Generation # 37 : 5.779540229695828

--> Family: # 63

FV at Mutated Child #1 at Generation # 37 : 2410.2024671322924 FV at Mutated Child #2 at Generation # 37 : 45.34677299310476 --> Family: # 64

FV at Mutated Child #1 at Generation # 37 : 2500.8332710656096 FV at Mutated Child #2 at Generation # 37 : 2232.8280113405244 --> Family: # 65

FV at Mutated Child #1 at Generation # 37 : 1.3019389628548108 FV at Mutated Child #2 at Generation # 37 : 9.899426155917617 --> Family: # 66

FV at Mutated Child #1 at Generation # 37 : 25.00431364564395 FV at Mutated Child #2 at Generation # 37 : 3.033094947698266 --> Family: # 67

FV at Mutated Child #1 at Generation # 37 : 8.047270266564206 FV at Mutated Child #2 at Generation # 37 : 8.089751378921989 --> Family: # 68

FV at Mutated Child #1 at Generation # 37 : 5.452047403939086 FV at Mutated Child #2 at Generation # 37 : 1.5265821163273738 --> Family: # 69

FV at Mutated Child #1 at Generation # 37 : 46.910864640430525 FV at Mutated Child #2 at Generation # 37 : 8.372470774745182 --> Family: # 70

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FV at Mutated Child #1 at Generation # 37 : 163.11789059250682
FV at Mutated Child #2 at Generation # 37 : 9.183984677994042
--> Family: # 71
FV at Mutated Child #1 at Generation # 37 : 46.333223414837
FV at Mutated Child #2 at Generation # 37 : 21.99173268861645
--> Family: # 72
FV at Mutated Child #1 at Generation # 37 : 632.3061581610398
FV at Mutated Child #2 at Generation # 37 : 126.55339782773633
--> Family: # 73
FV at Mutated Child #1 at Generation # 37 : 2.655530528463807
FV at Mutated Child #2 at Generation # 37 : 5.757782499946562
--> Family: # 74
FV at Mutated Child #1 at Generation # 37 : 3.32265480816602
FV at Mutated Child #2 at Generation # 37 : 156.65369347207988
--> Family: # 75
FV at Mutated Child #1 at Generation # 37 : 41.871473553056276
FV at Mutated Child #2 at Generation # 37 : 2.1906030342993446
--> Family: # 76
FV at Mutated Child #1 at Generation # 37 : 7.273564745427829
FV at Mutated Child #2 at Generation # 37 : 1.1771766727901452
--> Family: # 77
FV at Mutated Child #1 at Generation # 37 : 144.49806155331123
FV at Mutated Child #2 at Generation # 37 : 10.249554944275587
--> Family: # 78
FV at Mutated Child #1 at Generation # 37 : 1.7545673454010342
FV at Mutated Child #2 at Generation # 37 : 11.48834287195869
--> Family: # 79
FV at Mutated Child #1 at Generation # 37 : 10.935772486705345
FV at Mutated Child #2 at Generation # 37 : 24.16192833991138
--> Family: # 80
FV at Mutated Child #1 at Generation # 37 : 15.087933443575507
FV at Mutated Child #2 at Generation # 37 : 644.8424860790667
--> Generation: # 38
--> Family: # 1
FV at Mutated Child #1 at Generation # 38 : 7.088309102541779
FV at Mutated Child #2 at Generation # 38 : 0.718940889820268
--> Family: # 2
FV at Mutated Child #1 at Generation # 38 : 0.6370725202655831
FV at Mutated Child #2 at Generation # 38 : 0.9156998805275788
--> Family: # 3
FV at Mutated Child #1 at Generation # 38 : 28.857382727922925
FV at Mutated Child #2 at Generation # 38 : 121.25434314526791
--> Family: # 4
FV at Mutated Child #1 at Generation # 38 : 34.55371011073264
FV at Mutated Child #2 at Generation # 38 : 1.6260169648942833
--> Family: # 5
```

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FV at Mutated Child #1 at Generation # 38 : 137.7801974607758
FV at Mutated Child #2 at Generation # 38 : 0.625270366806063
--> Family: # 6
FV at Mutated Child #1 at Generation # 38 : 3.103723128450075
FV at Mutated Child #2 at Generation # 38 : 563.4161013370247
--> Family: # 7
FV at Mutated Child #1 at Generation # 38 : 31.384450820897115
FV at Mutated Child #2 at Generation # 38 : 109.56599913671482
--> Family: # 8
FV at Mutated Child #1 at Generation # 38 : 2.5091297468218845
FV at Mutated Child #2 at Generation # 38 : 5.738400601026739
--> Family: # 9
FV at Mutated Child #1 at Generation # 38 : 0.67831318666758
FV at Mutated Child #2 at Generation # 38 : 7.088309102541779
--> Family: # 10
FV at Mutated Child #1 at Generation # 38 : 30.218897439546467
FV at Mutated Child #2 at Generation # 38 : 0.7296721256511843
--> Family: # 11
FV at Mutated Child #1 at Generation # 38 : 0.8546436060914917
FV at Mutated Child #2 at Generation # 38 : 1.9348263215636186
--> Family: # 12
FV at Mutated Child #1 at Generation # 38 : 147.0987886053674
FV at Mutated Child #2 at Generation # 38 : 1.6399090760493409
--> Family: # 13
FV at Mutated Child #1 at Generation # 38 : 7.110713021032838
FV at Mutated Child #2 at Generation # 38 : 6.9654429654408085
--> Family: # 14
FV at Mutated Child #1 at Generation # 38 : 10.146783679050293
FV at Mutated Child #2 at Generation # 38 : 16.447648803747843
--> Family: # 15
FV at Mutated Child #1 at Generation # 38 : 131.73997505133778
FV at Mutated Child #2 at Generation # 38 : 11.899553564940431
--> Family: # 16
FV at Mutated Child #1 at Generation # 38 : 0.7858692313484152
FV at Mutated Child #2 at Generation # 38 : 0.6977812765699313
--> Family: # 17
FV at Mutated Child #1 at Generation # 38 : 94.3172063616072
FV at Mutated Child #2 at Generation # 38 : 0.7688511732511936
--> Family: # 18
FV at Mutated Child #1 at Generation # 38 : 138.99764687899008
FV at Mutated Child #2 at Generation # 38 : 555.9950479724945
--> Family: # 19
FV at Mutated Child #1 at Generation # 38 : 25.591815547715562
FV at Mutated Child #2 at Generation # 38 : 0.727840154900857
--> Family: # 20
```

FV at Mutated Child #1 at Generation # 38 : 574.6427470830583 FV at Mutated Child #2 at Generation # 38 : 0.9477537936454355 --> Family: # 21 FV at Mutated Child #1 at Generation # 38 : 2.3504711612175395 FV at Mutated Child #2 at Generation # 38 : 591.0569455345747 --> Family: # 22 FV at Mutated Child #1 at Generation # 38 : 1.8057306554354011 FV at Mutated Child #2 at Generation # 38 : 2.0311065728808315 --> Family: # 23 FV at Mutated Child #1 at Generation # 38 : 2.0440767650394607 FV at Mutated Child #2 at Generation # 38 : 121.69662080173316 --> Family: # 24 FV at Mutated Child #1 at Generation # 38 : 0.749106818890789 FV at Mutated Child #2 at Generation # 38 : 2.963343959621554 --> Family: # 25 FV at Mutated Child #1 at Generation # 38 : 561.8953222347718 FV at Mutated Child #2 at Generation # 38 : 30.518223629298728 --> Family: # 26 FV at Mutated Child #1 at Generation # 38 : 0.7036420236485686 FV at Mutated Child #2 at Generation # 38 : 143.06818656440313 --> Family: # 27 FV at Mutated Child #1 at Generation # 38 : 6.327100144864181 FV at Mutated Child #2 at Generation # 38 : 144.62052665649256 --> Family: # 28 FV at Mutated Child #1 at Generation # 38 : 8.389506648795855 FV at Mutated Child #2 at Generation # 38 : 0.7402205139773113 --> Family: # 29 FV at Mutated Child #1 at Generation # 38 : 1.8793760155326558 FV at Mutated Child #2 at Generation # 38 : 116.29089081103496 --> Family: # 30 FV at Mutated Child #1 at Generation # 38 : 542.2707697124146 FV at Mutated Child #2 at Generation # 38 : 387.1224975788321 --> Family: # 31 FV at Mutated Child #1 at Generation # 38 : 5.94117446272104 FV at Mutated Child #2 at Generation # 38 : 0.6270180544792798 --> Family: # 32 FV at Mutated Child #1 at Generation # 38 : 2.033009988443831 FV at Mutated Child #2 at Generation # 38 : 0.9916495996264149 --> Family: # 33 FV at Mutated Child #1 at Generation # 38 : 31.46965358613737 FV at Mutated Child #2 at Generation # 38 : 7.986496219046188 --> Family: # 34 FV at Mutated Child #1 at Generation # 38 : 0.730389985932796

FV at Mutated Child #2 at Generation # 38 : 18.560781618310354 --> Family: # 35

FV at Mutated Child #1 at Generation # 38 : 2137.797429798199

FV at Mutated Child #2 at Generation # 38 : 18.36545867771431 --> Family: # 36 FV at Mutated Child #1 at Generation # 38 : 93.17971523247883 FV at Mutated Child #2 at Generation # 38 : 483.54764242794766 --> Family: # 37 FV at Mutated Child #1 at Generation # 38 : 140.29131752258502 FV at Mutated Child #2 at Generation # 38 : 0.8151947618648631 --> Family: # 38 FV at Mutated Child #1 at Generation # 38 : 147.19822946757472 FV at Mutated Child #2 at Generation # 38 : 120.64763685789131 --> Family: # 39 FV at Mutated Child #1 at Generation # 38 : 106.77274024454717 FV at Mutated Child #2 at Generation # 38 : 21.481564373180127 --> Family: # 40 FV at Mutated Child #1 at Generation # 38 : 7.172586206689231 FV at Mutated Child #2 at Generation # 38 : 34.054839046123945 --> Family: # 41 FV at Mutated Child #1 at Generation # 38 : 2360.954563983272 FV at Mutated Child #2 at Generation # 38 : 0.8456448510380845 --> Family: # 42 FV at Mutated Child #1 at Generation # 38 : 13.757059792264922 FV at Mutated Child #2 at Generation # 38 : 0.6819903673699282 --> Family: # 43 FV at Mutated Child #1 at Generation # 38 : 141.69175512196142 FV at Mutated Child #2 at Generation # 38 : 590.5620144521412 --> Family: # 44 FV at Mutated Child #1 at Generation # 38 : 521.5781582202932 FV at Mutated Child #2 at Generation # 38 : 553.0908349859844 --> Family: # 45 FV at Mutated Child #1 at Generation # 38 : 545.8807814604892 FV at Mutated Child #2 at Generation # 38 : 84.40719808741557 --> Family: # 46 FV at Mutated Child #1 at Generation # 38: 467.5049750464543 FV at Mutated Child #2 at Generation # 38 : 4.58753702572722 --> Family: # 47 FV at Mutated Child #1 at Generation # 38 : 0.7616663001747217 FV at Mutated Child #2 at Generation # 38 : 105.69121289518941 --> Family: # 48 FV at Mutated Child #1 at Generation # 38 : 549.8140268462656 FV at Mutated Child #2 at Generation # 38 : 34.90635297220712 --> Family: # 49 FV at Mutated Child #1 at Generation # 38 : 1.2200572694198486 FV at Mutated Child #2 at Generation # 38 : 2430.0479609721465 --> Family: # 50 FV at Mutated Child #1 at Generation # 38 : 534.3442342625109 FV at Mutated Child #2 at Generation # 38 : 11.981681850715677

--> Family: # 51

FV at Mutated Child #1 at Generation # 38 : 28.33226265439264
FV at Mutated Child #2 at Generation # 38 : 27.774665849752207

--> Family: # 52

FV at Mutated Child #1 at Generation # 38 : 1.02888343417592 FV at Mutated Child #2 at Generation # 38 : 22.670924526217508

--> Family: # 53

FV at Mutated Child #1 at Generation # 38 : 6.8781079040406246 FV at Mutated Child #2 at Generation # 38 : 32.798960689876345

--> Family: # 54

FV at Mutated Child #1 at Generation # 38 : 0.6365798356793109 FV at Mutated Child #2 at Generation # 38 : 5.747655915502888 --> Family: # 55

FV at Mutated Child #1 at Generation # 38 : 1.6277902512798912 FV at Mutated Child #2 at Generation # 38 : 0.8760897162344927 --> Family: # 56

FV at Mutated Child #1 at Generation # 38 : 123.4079391891352 FV at Mutated Child #2 at Generation # 38 : 27.399680804192617 --> Family: # 57

FV at Mutated Child #1 at Generation # 38 : 0.6822614038050319 FV at Mutated Child #2 at Generation # 38 : 1.5044531444676426 --> Family: # 58

FV at Mutated Child #1 at Generation # 38 : 9.959025124885573 FV at Mutated Child #2 at Generation # 38 : 0.8738425230693616

--> Family: # 59

FV at Mutated Child #1 at Generation # 38 : 521.5781582202932 FV at Mutated Child #2 at Generation # 38 : 9.371597757760656 --> Family: # 60

FV at Mutated Child #1 at Generation # 38 : 0.6254638334230455 FV at Mutated Child #2 at Generation # 38 : 32.3840055616096 --> Family: # 61

FV at Mutated Child #1 at Generation # 38 : 0.935275522879073 FV at Mutated Child #2 at Generation # 38 : 17.080129866026567 --> Family: # 62

FV at Mutated Child #1 at Generation # 38 : 459.1007103188741 FV at Mutated Child #2 at Generation # 38 : 1.519392478388228 --> Family: # 63

FV at Mutated Child #1 at Generation # 38 : 1.6657554096499467 FV at Mutated Child #2 at Generation # 38 : 2367.713059399416 --> Family: # 64

FV at Mutated Child #1 at Generation # 38 : 4.123199668587921 FV at Mutated Child #2 at Generation # 38 : 2.4762768639685735 --> Family: # 65

FV at Mutated Child #1 at Generation # 38 : 84.17583880711383 FV at Mutated Child #2 at Generation # 38 : 3.3363897652222505 --> Family: # 66

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FV at Mutated Child #1 at Generation # 38 : 1.347548505289113
FV at Mutated Child #2 at Generation # 38 : 4.975079749463478
--> Family: # 67
FV at Mutated Child #1 at Generation # 38 : 550.9871722111291
FV at Mutated Child #2 at Generation # 38 : 3.174474825984518
--> Family: # 68
FV at Mutated Child #1 at Generation # 38 : 1.6129245282389364
FV at Mutated Child #2 at Generation # 38 : 0.6503540305479394
--> Family: # 69
FV at Mutated Child #1 at Generation # 38 : 13.182924690515623
FV at Mutated Child #2 at Generation # 38 : 1.2663366720445097
--> Family: # 70
FV at Mutated Child #1 at Generation # 38 : 1.7019293137115659
FV at Mutated Child #2 at Generation # 38 : 1.3455848943022812
--> Family: # 71
FV at Mutated Child #1 at Generation # 38 : 2.5059863459235863
FV at Mutated Child #2 at Generation # 38 : 32.59345259900307
--> Family: # 72
FV at Mutated Child #1 at Generation # 38 : 1.7300080896081904
FV at Mutated Child #2 at Generation # 38 : 34.90635297220712
--> Family: # 73
FV at Mutated Child #1 at Generation # 38 : 0.7016879581528672
FV at Mutated Child #2 at Generation # 38 : 1.2284427611992204
--> Family: # 74
FV at Mutated Child #1 at Generation # 38 : 593.3589532216151
FV at Mutated Child #2 at Generation # 38 : 141.53158303879977
--> Family: # 75
FV at Mutated Child #1 at Generation # 38 : 1.6129245282389364
FV at Mutated Child #2 at Generation # 38 : 3.848213535111656
--> Family: # 76
FV at Mutated Child #1 at Generation # 38 : 0.6754618575575029
FV at Mutated Child #2 at Generation # 38 : 3.4231745007357914
--> Family: # 77
FV at Mutated Child #1 at Generation # 38 : 136.23558248534425
FV at Mutated Child #2 at Generation # 38 : 4.123199668587921
--> Family: # 78
FV at Mutated Child #1 at Generation # 38 : 6.3249660340035705
FV at Mutated Child #2 at Generation # 38 : 0.9884811024839609
--> Family: # 79
FV at Mutated Child #1 at Generation # 38 : 1.5792754689277653
FV at Mutated Child #2 at Generation # 38 : 32.97495538795343
--> Family: # 80
FV at Mutated Child #1 at Generation # 38 : 2.70609120495511
FV at Mutated Child #2 at Generation # 38 : 112.05457325655307
--> Generation: # 39
--> Family: # 1
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FV at Mutated Child #1 at Generation # 39 : 8.27764322365408
FV at Mutated Child #2 at Generation # 39 : 550.87196875621
--> Family: # 2
FV at Mutated Child #1 at Generation # 39 : 1.0799948209300072
FV at Mutated Child #2 at Generation # 39 : 2.7539982995768413
--> Family: # 3
FV at Mutated Child #1 at Generation # 39 : 12.05371638725607
FV at Mutated Child #2 at Generation # 39 : 3.422527834476634
--> Family: # 4
FV at Mutated Child #1 at Generation # 39 : 535.6709654497735
FV at Mutated Child #2 at Generation # 39 : 1.5806981511373353
--> Family: # 5
FV at Mutated Child #1 at Generation # 39 : 12.66628762358104
FV at Mutated Child #2 at Generation # 39 : 9.78292532527352
--> Family: # 6
FV at Mutated Child #1 at Generation # 39 : 3.0067217645874695
FV at Mutated Child #2 at Generation # 39 : 572.6456378229307
--> Family: # 7
FV at Mutated Child #1 at Generation # 39 : 110.56192261067376
FV at Mutated Child #2 at Generation # 39 : 119.32572768515965
--> Family: # 8
FV at Mutated Child #1 at Generation # 39 : 4.343053943171973
FV at Mutated Child #2 at Generation # 39 : 434.2690329033668
--> Family: # 9
FV at Mutated Child #1 at Generation # 39 : 10.688253561672003
FV at Mutated Child #2 at Generation # 39 : 5.346235104731766
--> Family: # 10
FV at Mutated Child #1 at Generation # 39 : 584.2245442548776
FV at Mutated Child #2 at Generation # 39 : 102.91073997213459
--> Family: # 11
FV at Mutated Child #1 at Generation # 39 : 0.9710178650364304
FV at Mutated Child #2 at Generation # 39 : 27.62671913934059
--> Family: # 12
FV at Mutated Child #1 at Generation # 39 : 3.893777060470066
FV at Mutated Child #2 at Generation # 39 : 1.0536643722528627
--> Family: # 13
FV at Mutated Child #1 at Generation # 39 : 43.135645141120825
FV at Mutated Child #2 at Generation # 39 : 4.087202967404679
--> Family: # 14
FV at Mutated Child #1 at Generation # 39 : 7.07484021489816
FV at Mutated Child #2 at Generation # 39 : 613.6434844177065
--> Family: # 15
FV at Mutated Child #1 at Generation # 39 : 11.620159771732572
FV at Mutated Child #2 at Generation # 39 : 33.27528584152039
--> Family: # 16
```

FV at Mutated Child #1 at Generation # 39 : 2104.175492007397 FV at Mutated Child #2 at Generation # 39 : 2106.0826615567585 --> Family: # 17 FV at Mutated Child #1 at Generation # 39 : 8.339609084152627 FV at Mutated Child #2 at Generation # 39 : 3.585662784093777 --> Family: # 18 FV at Mutated Child #1 at Generation # 39 : 1.2422336246708046 FV at Mutated Child #2 at Generation # 39 : 4.202284925628565 --> Family: # 19 FV at Mutated Child #1 at Generation # 39 : 39.97613067641689 FV at Mutated Child #2 at Generation # 39 : 9.940532070550322 --> Family: # 20 FV at Mutated Child #1 at Generation # 39 : 142.55516117358405 FV at Mutated Child #2 at Generation # 39 : 31.130562469129856 --> Family: # 21 FV at Mutated Child #1 at Generation # 39 : 35.21382922521703 FV at Mutated Child #2 at Generation # 39 : 154.98279350167593 --> Family: # 22 FV at Mutated Child #1 at Generation # 39 : 42.97562173208459 FV at Mutated Child #2 at Generation # 39 : 3.6960430809715676 --> Family: # 23 FV at Mutated Child #1 at Generation # 39 : 13.039984835753046 FV at Mutated Child #2 at Generation # 39 : 3.2835811133852815 --> Family: # 24 FV at Mutated Child #1 at Generation # 39 : 2398.231712533986 FV at Mutated Child #2 at Generation # 39 : 3.9755551134154663 --> Family: # 25 FV at Mutated Child #1 at Generation # 39 : 1.079653843668076 FV at Mutated Child #2 at Generation # 39 : 6.022870346322743 --> Family: # 26 FV at Mutated Child #1 at Generation # 39 : 6.178001700612508 FV at Mutated Child #2 at Generation # 39 : 122.83485862651125 --> Family: # 27 FV at Mutated Child #1 at Generation # 39 : 1.237336981455419 FV at Mutated Child #2 at Generation # 39 : 1.250578381135084 --> Family: # 28 FV at Mutated Child #1 at Generation # 39 : 5.4539760607127725 FV at Mutated Child #2 at Generation # 39 : 29.224743574736237 --> Family: # 29 FV at Mutated Child #1 at Generation # 39 : 3.5314953419828883 FV at Mutated Child #2 at Generation # 39 : 152.512776372055 --> Family: # 30 FV at Mutated Child #1 at Generation # 39 : 3.893777060470066

--> Family: # 31 FV at Mutated Child #1 at Generation # 39 : 7.483169812289803

FV at Mutated Child #2 at Generation # 39 : 1.4358386524438376

FV at Mutated Child #2 at Generation # 39 : 84.24096804018369 --> Family: # 32 FV at Mutated Child #1 at Generation # 39 : 1.6870101357431828 FV at Mutated Child #2 at Generation # 39 : 2.596851482447871 --> Family: # 33 FV at Mutated Child #1 at Generation # 39 : 11.63589531285509 FV at Mutated Child #2 at Generation # 39 : 147.75087297793092 --> Family: # 34 FV at Mutated Child #1 at Generation # 39 : 16.525221766078886 FV at Mutated Child #2 at Generation # 39 : 7.4882543083978765 --> Family: # 35 FV at Mutated Child #1 at Generation # 39 : 1.3781674692927446 FV at Mutated Child #2 at Generation # 39 : 1.9806616790187994 --> Family: # 36 FV at Mutated Child #1 at Generation # 39 : 610.2229593924277 FV at Mutated Child #2 at Generation # 39 : 9.940532070550322 --> Family: # 37 FV at Mutated Child #1 at Generation # 39 : 15.187475314174785 FV at Mutated Child #2 at Generation # 39 : 1.5347368713164717 --> Family: # 38 FV at Mutated Child #1 at Generation # 39 : 35.306160249571064 FV at Mutated Child #2 at Generation # 39 : 33.04935330172675 --> Family: # 39 FV at Mutated Child #1 at Generation # 39 : 14.372799564408325 FV at Mutated Child #2 at Generation # 39 : 1.1829486374943263 --> Family: # 40 FV at Mutated Child #1 at Generation # 39 : 5.334802528424409 FV at Mutated Child #2 at Generation # 39 : 1.205592197604036 --> Family: # 41 FV at Mutated Child #1 at Generation # 39 : 34.04180596777547 FV at Mutated Child #2 at Generation # 39 : 2.678142527527682 --> Family: # 42 FV at Mutated Child #1 at Generation # 39 : 9.39752629042329 FV at Mutated Child #2 at Generation # 39 : 46.96857455314113 --> Family: # 43 FV at Mutated Child #1 at Generation # 39 : 1.5185809836702955 FV at Mutated Child #2 at Generation # 39 : 150.40274222588255 --> Family: # 44 FV at Mutated Child #1 at Generation # 39 : 1.9818235282279422 FV at Mutated Child #2 at Generation # 39 : 6.443203267143106 --> Family: # 45 FV at Mutated Child #1 at Generation # 39 : 121.39748036069723 FV at Mutated Child #2 at Generation # 39 : 34.7706756808557 --> Family: # 46 FV at Mutated Child #1 at Generation # 39 : 40.7422727998682 FV at Mutated Child #2 at Generation # 39 : 1.2283901757850906

--> Family: # 47 FV at Mutated Child #1 at Generation # 39 : 1.8447809622487177 FV at Mutated Child #2 at Generation # 39 : 9.559283717397374 --> Family: # 48 FV at Mutated Child #1 at Generation # 39 : 8.955191897005129 FV at Mutated Child #2 at Generation # 39 : 2357.6291917105805 --> Family: # 49 FV at Mutated Child #1 at Generation # 39 : 0.9460912437960596

FV at Mutated Child #2 at Generation # 39 : 9.347276854027417 --> Family: # 50

FV at Mutated Child #1 at Generation # 39 : 11.773247391420245 FV at Mutated Child #2 at Generation # 39 : 113.7179388210335 --> Family: # 51

FV at Mutated Child #1 at Generation # 39 : 33.50775651089229 FV at Mutated Child #2 at Generation # 39 : 121.5809757178823 --> Family: # 52

FV at Mutated Child #1 at Generation # 39 : 6.9832268329034495 FV at Mutated Child #2 at Generation # 39 : 4.139238059338286 --> Family: # 53

FV at Mutated Child #1 at Generation # 39 : 28.021586342486735 FV at Mutated Child #2 at Generation # 39 : 8.767649920228088 --> Family: # 54

FV at Mutated Child #1 at Generation # 39 : 2.6438317001344216 FV at Mutated Child #2 at Generation # 39 : 3.8896337911210037 --> Family: # 55

FV at Mutated Child #1 at Generation # 39 : 11.814409950217604 FV at Mutated Child #2 at Generation # 39 : 15.658391798332515 --> Family: # 56

FV at Mutated Child #1 at Generation # 39 : 1.6723708913045106 FV at Mutated Child #2 at Generation # 39 : 28.236384883529617 --> Family: # 57

FV at Mutated Child #1 at Generation # 39 : 498.7025156229178 FV at Mutated Child #2 at Generation # 39 : 32.49470297472804 --> Family: # 58

FV at Mutated Child #1 at Generation # 39 : 11.31847017436774 FV at Mutated Child #2 at Generation # 39 : 42.339621875761

--> Family: # 59

FV at Mutated Child #1 at Generation # 39 : 5.24225780986287 FV at Mutated Child #2 at Generation # 39 : 2449.8367194726434 --> Family: # 60

FV at Mutated Child #1 at Generation # 39 : 12.698157854184938 FV at Mutated Child #2 at Generation # 39 : 0.7941766722191093 --> Family: # 61

FV at Mutated Child #1 at Generation # 39 : 1.168981234423148 FV at Mutated Child #2 at Generation # 39 : 1.8179000802235654 --> Family: # 62

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FV at Mutated Child #1 at Generation # 39 : 168.45938255979192
FV at Mutated Child #2 at Generation # 39 : 1.3638975436417873
--> Family: # 63
FV at Mutated Child #1 at Generation # 39 : 18.948207459466417
FV at Mutated Child #2 at Generation # 39 : 28.69987085933701
--> Family: # 64
FV at Mutated Child #1 at Generation # 39 : 151.52163804223488
FV at Mutated Child #2 at Generation # 39 : 2.8259439194306206
--> Family: # 65
FV at Mutated Child #1 at Generation # 39 : 11.68785614375727
FV at Mutated Child #2 at Generation # 39 : 21.54289644699804
--> Family: # 66
FV at Mutated Child #1 at Generation # 39 : 8.298933560337469
FV at Mutated Child #2 at Generation # 39 : 5.415225419700204
--> Family: # 67
FV at Mutated Child #1 at Generation # 39 : 9.08511553330081
FV at Mutated Child #2 at Generation # 39 : 147.54451955507133
--> Family: # 68
FV at Mutated Child #1 at Generation # 39 : 2.3702515578777534
FV at Mutated Child #2 at Generation # 39 : 12.621085665465127
--> Family: # 69
FV at Mutated Child #1 at Generation # 39 : 11.773247391420245
FV at Mutated Child #2 at Generation # 39 : 28.264025890569297
--> Family: # 70
FV at Mutated Child #1 at Generation # 39 : 149.7947350689631
FV at Mutated Child #2 at Generation # 39 : 101.4941844282597
--> Family: # 71
FV at Mutated Child #1 at Generation # 39 : 490.8666568369891
FV at Mutated Child #2 at Generation # 39 : 29.17088711843854
--> Family: # 72
FV at Mutated Child #1 at Generation # 39 : 9.08511553330081
FV at Mutated Child #2 at Generation # 39 : 33.69475195535714
--> Family: # 73
FV at Mutated Child #1 at Generation # 39 : 1.4211815819172502
FV at Mutated Child #2 at Generation # 39 : 1.6737282900456358
--> Family: # 74
FV at Mutated Child #1 at Generation # 39 : 12.225582788782988
FV at Mutated Child #2 at Generation # 39 : 1.8560690899685204
--> Family: # 75
FV at Mutated Child #1 at Generation # 39 : 84.24096804018369
FV at Mutated Child #2 at Generation # 39 : 2535.7463090746232
--> Family: # 76
FV at Mutated Child #1 at Generation # 39 : 6.94264541302185
FV at Mutated Child #2 at Generation # 39 : 5.367210839910428
--> Family: # 77
```

Ex 1 2 3 FV at Mutated Child #1 at Generation # 39 : 30.381371801838302 FV at Mutated Child #2 at Generation # 39 : 18.04335926471898 --> Family: # 78 FV at Mutated Child #1 at Generation # 39 : 13.391445834668772 FV at Mutated Child #2 at Generation # 39 : 1.2696740482132567 --> Family: # 79 FV at Mutated Child #1 at Generation # 39 : 2.2213591642826316 FV at Mutated Child #2 at Generation # 39 : 17.615224040068487 --> Family: # 80 FV at Mutated Child #1 at Generation # 39 : 4.365161999130101 FV at Mutated Child #2 at Generation # 39 : 30.357183174457465 --> Generation: # 40 --> Family: # 1 FV at Mutated Child #1 at Generation # 40 : 0.8133862192969284 FV at Mutated Child #2 at Generation # 40 : 29.826308482179616 --> Family: # 2 FV at Mutated Child #1 at Generation # 40 : 0.65671938634875 FV at Mutated Child #2 at Generation # 40 : 0.6279821641256506 --> Family: # 3 FV at Mutated Child #1 at Generation # 40 : 0.9705608985862881 FV at Mutated Child #2 at Generation # 40 : 0.648495361429707 --> Family: # 4 FV at Mutated Child #1 at Generation # 40 : 0.826952324839038 FV at Mutated Child #2 at Generation # 40 : 0.625270366806063 --> Family: # 5 FV at Mutated Child #1 at Generation # 40 : 1.2663366720445097 FV at Mutated Child #2 at Generation # 40 : 522.6932843574867 --> Family: # 6 FV at Mutated Child #1 at Generation # 40 : 1.0649698561183314 FV at Mutated Child #2 at Generation # 40 : 129.06691092341924 --> Family: # 7 FV at Mutated Child #1 at Generation # 40 : 0.661021578750909 FV at Mutated Child #2 at Generation # 40 : 94.1884375673506 --> Family: # 8 FV at Mutated Child #1 at Generation # 40 : 3.588249589813205 FV at Mutated Child #2 at Generation # 40 : 136.0783131897415 --> Family: # 9 FV at Mutated Child #1 at Generation # 40 : 0.7576510668199198 FV at Mutated Child #2 at Generation # 40 : 128.8699936072838 --> Family: # 10 FV at Mutated Child #1 at Generation # 40 : 0.7086523444413426 FV at Mutated Child #2 at Generation # 40 : 3.764330973259649 --> Family: # 11 FV at Mutated Child #1 at Generation # 40 : 0.7304309220780956 FV at Mutated Child #2 at Generation # 40 : 0.7391606111196177 --> Family: # 12

FV at Mutated Child #1 at Generation # 40 : 139.2234896616628 FV at Mutated Child #2 at Generation # 40 : 0.619726385391685 --> Family: # 13 FV at Mutated Child #1 at Generation # 40 : 0.7268850034106713 FV at Mutated Child #2 at Generation # 40 : 84.97936095951816 --> Family: # 14 FV at Mutated Child #1 at Generation # 40 : 1.2469330100425373 FV at Mutated Child #2 at Generation # 40 : 3.9326811726769817 --> Family: # 15 FV at Mutated Child #1 at Generation # 40 : 345.09323029160595 FV at Mutated Child #2 at Generation # 40 : 1.218523333475047 --> Family: # 16 FV at Mutated Child #1 at Generation # 40 : 103.68452721424723 FV at Mutated Child #2 at Generation # 40 : 0.6335846645334892 --> Family: # 17 FV at Mutated Child #1 at Generation # 40 : 30.959734850160807 FV at Mutated Child #2 at Generation # 40 : 14.402300827113528 --> Family: # 18 FV at Mutated Child #1 at Generation # 40 : 2.4956094141988237 FV at Mutated Child #2 at Generation # 40 : 13.738585725484917 --> Family: # 19 FV at Mutated Child #1 at Generation # 40 : 106.26131462546698 FV at Mutated Child #2 at Generation # 40 : 0.6698325804305985 --> Family: # 20 FV at Mutated Child #1 at Generation # 40 : 0.6485128847140982 FV at Mutated Child #2 at Generation # 40 : 0.8354380158025893 --> Family: # 21 FV at Mutated Child #1 at Generation # 40 : 16.20435232697366 FV at Mutated Child #2 at Generation # 40 : 544.4868286862081 --> Family: # 22 FV at Mutated Child #1 at Generation # 40 : 477.7730141363496 FV at Mutated Child #2 at Generation # 40 : 2.54871448249932 --> Family: # 23 FV at Mutated Child #1 at Generation # 40 : 97.83490967733236 FV at Mutated Child #2 at Generation # 40 : 32.26823550782404 --> Family: # 24 FV at Mutated Child #1 at Generation # 40 : 0.6819903673699282 FV at Mutated Child #2 at Generation # 40 : 0.826952324839038 --> Family: # 25 FV at Mutated Child #1 at Generation # 40 : 124.4176217133633 FV at Mutated Child #2 at Generation # 40 : 30.488418418688358 --> Family: # 26 FV at Mutated Child #1 at Generation # 40 : 0.7721164188519489

FV at Mutated Child #2 at Generation # 40 : 1.2565678230688326 --> Family: # 27

FV at Mutated Child #1 at Generation # 40 : 10.8759376951863

FV at Mutated Child #2 at Generation # 40 : 470.3357611037344 --> Family: # 28 FV at Mutated Child #1 at Generation # 40 : 28.444178008191805 FV at Mutated Child #2 at Generation # 40 : 1.4496625023162757 --> Family: # 29 FV at Mutated Child #1 at Generation # 40 : 17.744429574858515 FV at Mutated Child #2 at Generation # 40 : 5.110302141414014 --> Family: # 30 FV at Mutated Child #1 at Generation # 40 : 0.9673770658483838 FV at Mutated Child #2 at Generation # 40 : 73.46574964034001 --> Family: # 31 FV at Mutated Child #1 at Generation # 40 : 0.6560270617055608 FV at Mutated Child #2 at Generation # 40 : 14.935583261601543 --> Family: # 32 FV at Mutated Child #1 at Generation # 40 : 31.56209412714508 FV at Mutated Child #2 at Generation # 40 : 1.6287224460968825 --> Family: # 33 FV at Mutated Child #1 at Generation # 40 : 30.752598962624575 FV at Mutated Child #2 at Generation # 40 : 0.6344036733675132 --> Family: # 34 FV at Mutated Child #1 at Generation # 40 : 3.0554790352871106 FV at Mutated Child #2 at Generation # 40 : 0.7088162510247016 --> Family: # 35 FV at Mutated Child #1 at Generation # 40 : 0.7458321657767085 FV at Mutated Child #2 at Generation # 40 : 0.7138815589632651 --> Family: # 36 FV at Mutated Child #1 at Generation # 40 : 538.961666502207 FV at Mutated Child #2 at Generation # 40 : 20.444633951869857 --> Family: # 37 FV at Mutated Child #1 at Generation # 40 : 2332.975677975315 FV at Mutated Child #2 at Generation # 40 : 137.7887726613592 --> Family: # 38 FV at Mutated Child #1 at Generation # 40 : 0.5408553136776902 FV at Mutated Child #2 at Generation # 40 : 0.7554747943286406 --> Family: # 39 FV at Mutated Child #1 at Generation # 40 : 0.6251383152148681 FV at Mutated Child #2 at Generation # 40 : 0.818006642355029 --> Family: # 40 FV at Mutated Child #1 at Generation # 40 : 5.548891736667407 FV at Mutated Child #2 at Generation # 40 : 0.7344943668308066 --> Family: # 41 FV at Mutated Child #1 at Generation # 40 : 0.6865804805770255 FV at Mutated Child #2 at Generation # 40 : 5.211572194521442 --> Family: # 42 FV at Mutated Child #1 at Generation # 40 : 20.58683641940902

FV at Mutated Child #2 at Generation # 40 : 12.826799684416216

--> Family: # 43

FV at Mutated Child #1 at Generation # 40 : 0.7304829875803064 FV at Mutated Child #2 at Generation # 40 : 139.86058221980915 --> Family: # 44

FV at Mutated Child #1 at Generation # 40 : 51.781961925642705 FV at Mutated Child #2 at Generation # 40 : 133.45173484460256 --> Family: # 45

FV at Mutated Child #1 at Generation # 40 : 3.9771071560488798 FV at Mutated Child #2 at Generation # 40 : 1.1825432202935224 --> Family: # 46

FV at Mutated Child #1 at Generation # 40 : 470.3357611037344 FV at Mutated Child #2 at Generation # 40 : 127.7747762644507 --> Family: # 47

FV at Mutated Child #1 at Generation # 40 : 51.85853838992278
FV at Mutated Child #2 at Generation # 40 : 2.0285818023753315
--> Family: # 48

FV at Mutated Child #1 at Generation # 40 : 518.4989835325927 FV at Mutated Child #2 at Generation # 40 : 0.7333187475586564 --> Family: # 49

FV at Mutated Child #1 at Generation # 40 : 0.8087877614314583 FV at Mutated Child #2 at Generation # 40 : 136.99110560635086 --> Family: # 50

FV at Mutated Child #1 at Generation # 40 : 2413.606730287431 FV at Mutated Child #2 at Generation # 40 : 604.4754373906642 --> Family: # 51

FV at Mutated Child #1 at Generation # 40 : 2325.666083898298 FV at Mutated Child #2 at Generation # 40 : 32.54329459065344 --> Family: # 52

FV at Mutated Child #1 at Generation # 40 : 0.6837794505870113 FV at Mutated Child #2 at Generation # 40 : 0.619569658446242 --> Family: # 53

FV at Mutated Child #1 at Generation # 40 : 1.2284427611992204 FV at Mutated Child #2 at Generation # 40 : 0.66521976067313 --> Family: # 54

FV at Mutated Child #1 at Generation # 40 : 1579.6235210862976 FV at Mutated Child #2 at Generation # 40 : 2355.685371426517 --> Family: # 55

FV at Mutated Child #1 at Generation # 40 : 28.029454404800713 FV at Mutated Child #2 at Generation # 40 : 5.53536083715053 --> Family: # 56

FV at Mutated Child #1 at Generation # 40 : 4.469002307538619 FV at Mutated Child #2 at Generation # 40 : 3.1282107134684156 --> Family: # 57

FV at Mutated Child #1 at Generation # 40 : 4.123199668587921 FV at Mutated Child #2 at Generation # 40 : 0.8159750152734058 --> Family: # 58

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FV at Mutated Child #1 at Generation # 40 : 1.3456017142286472
FV at Mutated Child #2 at Generation # 40 : 0.711042498969474
--> Family: # 59
FV at Mutated Child #1 at Generation # 40 : 1.3456017142286472
FV at Mutated Child #2 at Generation # 40 : 19.260154330521313
--> Family: # 60
FV at Mutated Child #1 at Generation # 40 : 7.553433705972561
FV at Mutated Child #2 at Generation # 40 : 0.6503540305479394
--> Family: # 61
FV at Mutated Child #1 at Generation # 40 : 1.7230771087886545
FV at Mutated Child #2 at Generation # 40 : 115.87934298278772
--> Family: # 62
FV at Mutated Child #1 at Generation # 40 : 597.7665898024353
FV at Mutated Child #2 at Generation # 40 : 0.6871626080988481
--> Family: # 63
FV at Mutated Child #1 at Generation # 40 : 0.7453700457761292
FV at Mutated Child #2 at Generation # 40 : 1.8249067886314725
--> Family: # 64
FV at Mutated Child #1 at Generation # 40 : 1.442674264502472
FV at Mutated Child #2 at Generation # 40 : 0.7025075791933525
--> Family: # 65
FV at Mutated Child #1 at Generation # 40 : 3.8903654633947666
FV at Mutated Child #2 at Generation # 40 : 4.07764322339606
--> Family: # 66
FV at Mutated Child #1 at Generation # 40 : 0.701324590937346
FV at Mutated Child #2 at Generation # 40 : 7.436649725348102
--> Family: # 67
FV at Mutated Child #1 at Generation # 40 : 107.53725538897591
FV at Mutated Child #2 at Generation # 40 : 0.6831409902587249
--> Family: # 68
FV at Mutated Child #1 at Generation # 40 : 1.306859912043155
FV at Mutated Child #2 at Generation # 40 : 135.10416645837253
--> Family: # 69
FV at Mutated Child #1 at Generation # 40 : 100.98817644948781
FV at Mutated Child #2 at Generation # 40 : 3.1937977416338788
--> Family: # 70
FV at Mutated Child #1 at Generation # 40 : 6.391165657575672
FV at Mutated Child #2 at Generation # 40 : 16.168766121469815
--> Family: # 71
FV at Mutated Child #1 at Generation # 40 : 122.43399325717422
FV at Mutated Child #2 at Generation # 40 : 27.65300126102234
--> Family: # 72
FV at Mutated Child #1 at Generation # 40 : 0.7807117046652388
FV at Mutated Child #2 at Generation # 40 : 130.50042260126943
--> Family: # 73
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FV at Mutated Child #1 at Generation # 40 : 32.26823550782404 FV at Mutated Child #2 at Generation # 40 : 0.6361982906051047 --> Family: # 74 FV at Mutated Child #1 at Generation # 40 : 4.949282566058718 FV at Mutated Child #2 at Generation # 40 : 2.41750767407245 --> Family: # 75 FV at Mutated Child #1 at Generation # 40 : 33.147564253847385 FV at Mutated Child #2 at Generation # 40 : 24.850287758394376 --> Family: # 76 FV at Mutated Child #1 at Generation # 40 : 599.9239083423778 FV at Mutated Child #2 at Generation # 40 : 558.8146998617037 --> Family: # 77 FV at Mutated Child #1 at Generation # 40 : 14.820543396937122 FV at Mutated Child #2 at Generation # 40 : 1.0734725503976588 --> Family: # 78 FV at Mutated Child #1 at Generation # 40 : 1.3989586376064098 FV at Mutated Child #2 at Generation # 40 : 30.959734850160807 --> Family: # 79 FV at Mutated Child #1 at Generation # 40 : 6.400102111483939 FV at Mutated Child #2 at Generation # 40 : 1.1637611684530986 --> Family: # 80 FV at Mutated Child #1 at Generation # 40 : 0.7217115515731425 FV at Mutated Child #2 at Generation # 40 : 556.6518615995798 --> Generation: # 41 --> Family: # 1 FV at Mutated Child #1 at Generation # 41 : 10.459164755525382 FV at Mutated Child #2 at Generation # 41 : 1.1252553994976031 --> Family: # 2 FV at Mutated Child #1 at Generation # 41 : 9.383210622518119 FV at Mutated Child #2 at Generation # 41 : 596.8133342845751 --> Family: # 3 FV at Mutated Child #1 at Generation # 41 : 3.6577872618896214 FV at Mutated Child #2 at Generation # 41 : 3.223655674906961 --> Family: # 4 FV at Mutated Child #1 at Generation # 41 : 3.2381778208155336 FV at Mutated Child #2 at Generation # 41 : 0.9971997263244288 --> Family: # 5 FV at Mutated Child #1 at Generation # 41 : 28.193168609773256 FV at Mutated Child #2 at Generation # 41 : 1.3277687539170326 --> Family: # 6 FV at Mutated Child #1 at Generation # 41 : 12.851425944306733 FV at Mutated Child #2 at Generation # 41 : 0.9364412121440402 --> Family: # 7 FV at Mutated Child #1 at Generation # 41 : 1.362933538988255 FV at Mutated Child #2 at Generation # 41 : 4.635347478434744 --> Family: # 8

FV at Mutated Child #1 at Generation # 41 : 10.701924693221756 FV at Mutated Child #2 at Generation # 41 : 155.11052797939462 --> Family: # 9 FV at Mutated Child #1 at Generation # 41 : 157.4192519258664 FV at Mutated Child #2 at Generation # 41 : 9.895446219264885 --> Family: # 10 FV at Mutated Child #1 at Generation # 41 : 12.344529187055855 FV at Mutated Child #2 at Generation # 41 : 1.3225793910693715 --> Family: # 11 FV at Mutated Child #1 at Generation # 41 : 4.460199777679466 FV at Mutated Child #2 at Generation # 41 : 8.927725448308863 --> Family: # 12 FV at Mutated Child #1 at Generation # 41 : 36.570554711497095 FV at Mutated Child #2 at Generation # 41 : 0.976751802003735 --> Family: # 13 FV at Mutated Child #1 at Generation # 41 : 144.3779715676214 FV at Mutated Child #2 at Generation # 41 : 5.4406861828081965 --> Family: # 14 FV at Mutated Child #1 at Generation # 41 : 1.7734593973627306 FV at Mutated Child #2 at Generation # 41 : 1.1862623582108611 --> Family: # 15 FV at Mutated Child #1 at Generation # 41 : 0.7782940621932469 FV at Mutated Child #2 at Generation # 41 : 1.3646258851402213 --> Family: # 16 FV at Mutated Child #1 at Generation # 41 : 10.661895058878994 FV at Mutated Child #2 at Generation # 41 : 3.841770320932798 --> Family: # 17 FV at Mutated Child #1 at Generation # 41 : 4.736044506025792 FV at Mutated Child #2 at Generation # 41 : 149.69595822203 --> Family: # 18 FV at Mutated Child #1 at Generation # 41 : 631.3394666864498 FV at Mutated Child #2 at Generation # 41 : 21.121534235286394 --> Family: # 19 FV at Mutated Child #1 at Generation # 41 : 10.732378288715182 FV at Mutated Child #2 at Generation # 41 : 3.0445525339668547 --> Family: # 20 FV at Mutated Child #1 at Generation # 41 : 39.04004229461329 FV at Mutated Child #2 at Generation # 41 : 1.3622295100298243 --> Family: # 21 FV at Mutated Child #1 at Generation # 41 : 1.3224992202617267 FV at Mutated Child #2 at Generation # 41 : 108.10898807211353 --> Family: # 22 FV at Mutated Child #1 at Generation # 41 : 151.81301917583383 FV at Mutated Child #2 at Generation # 41 : 165.14883095547276

FV at Mutated Child #1 at Generation # 41 : 159.49032414139114

--> Family: # 23

FV at Mutated Child #2 at Generation # 41 : 3.628422877744976 --> Family: # 24 FV at Mutated Child #1 at Generation # 41 : 2.067106006148891 FV at Mutated Child #2 at Generation # 41 : 7.356395491462545 --> Family: # 25 FV at Mutated Child #1 at Generation # 41 : 596.8133342845751 FV at Mutated Child #2 at Generation # 41 : 37.83988852323488 --> Family: # 26 FV at Mutated Child #1 at Generation # 41 : 4.139238059338286 FV at Mutated Child #2 at Generation # 41 : 7.131572313832791 --> Family: # 27 FV at Mutated Child #1 at Generation # 41 : 30.14781428512734 FV at Mutated Child #2 at Generation # 41 : 11.653413050982236 --> Family: # 28 FV at Mutated Child #1 at Generation # 41 : 2541.8094303403022 FV at Mutated Child #2 at Generation # 41 : 43.718783910996024 --> Family: # 29 FV at Mutated Child #1 at Generation # 41 : 6.028852534373344 FV at Mutated Child #2 at Generation # 41 : 2.022747545070139 --> Family: # 30 FV at Mutated Child #1 at Generation # 41 : 4.087202967404679 FV at Mutated Child #2 at Generation # 41 : 3.4916989885184337 --> Family: # 31 FV at Mutated Child #1 at Generation # 41 : 11.31847017436774 FV at Mutated Child #2 at Generation # 41 : 1.6784622834289318 --> Family: # 32 FV at Mutated Child #1 at Generation # 41 : 38.73709761886701 FV at Mutated Child #2 at Generation # 41 : 154.60437331758953 --> Family: # 33 FV at Mutated Child #1 at Generation # 41 : 541.9427725185365 FV at Mutated Child #2 at Generation # 41 : 152.81912282178467 --> Family: # 34 FV at Mutated Child #1 at Generation # 41 : 625.2967745906985 FV at Mutated Child #2 at Generation # 41 : 10.317031117561246 --> Family: # 35 FV at Mutated Child #1 at Generation # 41 : 9.822322181092144 FV at Mutated Child #2 at Generation # 41 : 3.087143612817339 --> Family: # 36 FV at Mutated Child #1 at Generation # 41 : 37.79699505717818 FV at Mutated Child #2 at Generation # 41 : 158.12959046867127 --> Family: # 37 FV at Mutated Child #1 at Generation # 41 : 35.21382922521703 FV at Mutated Child #2 at Generation # 41 : 1.0531406008617608 --> Family: # 38 FV at Mutated Child #1 at Generation # 41 : 37.01477904102056

FV at Mutated Child #2 at Generation # 41 : 1.843946924120583

--> Family: # 39

FV at Mutated Child #1 at Generation # 41 : 10.23008431303052 FV at Mutated Child #2 at Generation # 41 : 1.6723708913045106

--> Family: # 40

FV at Mutated Child #1 at Generation # 41 : 38.370226606945046 FV at Mutated Child #2 at Generation # 41 : 4.437909610578879

--> Family: # 41

FV at Mutated Child #1 at Generation # 41 : 137.36843341786854 FV at Mutated Child #2 at Generation # 41 : 11.814409950217604 --> Family: # 42

FV at Mutated Child #1 at Generation # 41 : 34.402640322980844 FV at Mutated Child #2 at Generation # 41 : 628.4426889801457 --> Family: # 43

FV at Mutated Child #1 at Generation # 41 : 40.935864893872534 FV at Mutated Child #2 at Generation # 41 : 2.6292502236336426 --> Family: # 44

FV at Mutated Child #1 at Generation # 41 : 39.65319319754108 FV at Mutated Child #2 at Generation # 41 : 1.2696740482132567 --> Family: # 45

FV at Mutated Child #1 at Generation # 41 : 591.3243056720232 FV at Mutated Child #2 at Generation # 41 : 10.78052894710178 --> Family: # 46

FV at Mutated Child #1 at Generation # 41 : 28.959208699208038 FV at Mutated Child #2 at Generation # 41 : 12.718240484007403 --> Family: # 47

FV at Mutated Child #1 at Generation # 41 : 18.601429106580667 FV at Mutated Child #2 at Generation # 41 : 5.779540229695828 --> Family: # 48

FV at Mutated Child #1 at Generation # 41 : 16.46631772716269 FV at Mutated Child #2 at Generation # 41 : 1.3638975436417873

--> Family: # 49

FV at Mutated Child #1 at Generation # 41 : 11.171561468701826 FV at Mutated Child #2 at Generation # 41 : 1.7571697508485369 --> Family: # 50

FV at Mutated Child #1 at Generation # 41 : 1.8179000802235654 FV at Mutated Child #2 at Generation # 41 : 0.8579943184031148 --> Family: # 51

FV at Mutated Child #1 at Generation # 41 : 36.12719441093358 FV at Mutated Child #2 at Generation # 41 : 155.9312674356894 --> Family: # 52

FV at Mutated Child #1 at Generation # 41 : 1.8165447832845811 FV at Mutated Child #2 at Generation # 41 : 2.012326270332028 --> Family: # 53

FV at Mutated Child #1 at Generation # 41 : 10.68994362688471 FV at Mutated Child #2 at Generation # 41 : 1.3287496254284699 --> Family: # 54

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FV at Mutated Child #1 at Generation # 41 : 12.452639627810303
FV at Mutated Child #2 at Generation # 41 : 1.7749151466501998
--> Family: # 55
FV at Mutated Child #1 at Generation # 41 : 1.109157545382489
FV at Mutated Child #2 at Generation # 41 : 2.652305076015444
--> Family: # 56
FV at Mutated Child #1 at Generation # 41 : 10.079395276345041
FV at Mutated Child #2 at Generation # 41 : 10.438915989764684
--> Family: # 57
FV at Mutated Child #1 at Generation # 41 : 12.380515917587818
FV at Mutated Child #2 at Generation # 41 : 2.8856684808967
--> Family: # 58
FV at Mutated Child #1 at Generation # 41 : 1.7650326041635744
FV at Mutated Child #2 at Generation # 41 : 5.813280597662386
--> Family: # 59
FV at Mutated Child #1 at Generation # 41 : 41.832042526188914
FV at Mutated Child #2 at Generation # 41 : 636.2184861670471
--> Family: # 60
FV at Mutated Child #1 at Generation # 41 : 7.276896824265357
FV at Mutated Child #2 at Generation # 41 : 0.8684527219054122
--> Family: # 61
FV at Mutated Child #1 at Generation # 41 : 601.3960065690401
FV at Mutated Child #2 at Generation # 41 : 6.9966654064507345
--> Family: # 62
FV at Mutated Child #1 at Generation # 41 : 10.154590746689419
FV at Mutated Child #2 at Generation # 41 : 1.915096570608649
--> Family: # 63
FV at Mutated Child #1 at Generation # 41 : 633.5951161161252
FV at Mutated Child #2 at Generation # 41 : 35.989294911918805
--> Family: # 64
FV at Mutated Child #1 at Generation # 41 : 11.98011490879929
FV at Mutated Child #2 at Generation # 41 : 1.4283470233827664
--> Family: # 65
FV at Mutated Child #1 at Generation # 41 : 3.841770320932798
FV at Mutated Child #2 at Generation # 41 : 1.168981234423148
--> Family: # 66
FV at Mutated Child #1 at Generation # 41 : 10.080340073958848
FV at Mutated Child #2 at Generation # 41 : 136.13171810478497
--> Family: # 67
FV at Mutated Child #1 at Generation # 41 : 0.8163230072914391
FV at Mutated Child #2 at Generation # 41 : 1.0536643722528627
--> Family: # 68
FV at Mutated Child #1 at Generation # 41 : 154.98279350167593
FV at Mutated Child #2 at Generation # 41 : 10.766885965328232
--> Family: # 69
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FV at Mutated Child #1 at Generation # 41 : 5.962924862241004 FV at Mutated Child #2 at Generation # 41 : 32.23209152188359 --> Family: # 70 FV at Mutated Child #1 at Generation # 41 : 2.013019740417989 FV at Mutated Child #2 at Generation # 41 : 1.7151161585763015 --> Family: # 71 FV at Mutated Child #1 at Generation # 41 : 10.347971563928608 FV at Mutated Child #2 at Generation # 41 : 28.082649180064326 --> Family: # 72 FV at Mutated Child #1 at Generation # 41 : 8.064241355387253 FV at Mutated Child #2 at Generation # 41 : 2.954137198934583 --> Family: # 73 FV at Mutated Child #1 at Generation # 41 : 7.027494522875148 FV at Mutated Child #2 at Generation # 41 : 44.37779442118637 --> Family: # 74 FV at Mutated Child #1 at Generation # 41 : 3.0274674579274654 FV at Mutated Child #2 at Generation # 41 : 1.1114115589632458 --> Family: # 75 FV at Mutated Child #1 at Generation # 41 : 607.4126022034645 FV at Mutated Child #2 at Generation # 41 : 1.2062886554761252 --> Family: # 76 FV at Mutated Child #1 at Generation # 41 : 11.773247391420245 FV at Mutated Child #2 at Generation # 41 : 1.5183358596292185 --> Family: # 77 FV at Mutated Child #1 at Generation # 41 : 1.8447809622487177 FV at Mutated Child #2 at Generation # 41 : 3.011024649008669 --> Family: # 78 FV at Mutated Child #1 at Generation # 41 : 32.30669747937268 FV at Mutated Child #2 at Generation # 41 : 2.8756669897181815 --> Family: # 79 FV at Mutated Child #1 at Generation # 41 : 1.526992853057099 FV at Mutated Child #2 at Generation # 41 : 12.14491364477415 --> Family: # 80 FV at Mutated Child #1 at Generation # 41 : 7.833483046376389 FV at Mutated Child #2 at Generation # 41 : 10.193596817845227 --> Generation: # 42 --> Family: # 1 FV at Mutated Child #1 at Generation # 42 : 0.6418078171516476 FV at Mutated Child #2 at Generation # 42 : 0.7114635097252916 --> Family: # 2 FV at Mutated Child #1 at Generation # 42 : 0.7505628328174441 FV at Mutated Child #2 at Generation # 42 : 1.0889317811318018 --> Family: # 3 FV at Mutated Child #1 at Generation # 42 : 0.7453700457761292 FV at Mutated Child #2 at Generation # 42 : 6.0023103094257895 --> Family: # 4

FV at Mutated Child #1 at Generation # 42 : 0.6260874476280004 FV at Mutated Child #2 at Generation # 42 : 27.6428927509214 --> Family: # 5 FV at Mutated Child #1 at Generation # 42 : 0.6863365240266511 FV at Mutated Child #2 at Generation # 42 : 533.7502433423753 --> Family: # 6 FV at Mutated Child #1 at Generation # 42 : 1.4313142605112865 FV at Mutated Child #2 at Generation # 42 : 0.7314891439391958 --> Family: # 7 FV at Mutated Child #1 at Generation # 42 : 1.7007885089614372 FV at Mutated Child #2 at Generation # 42 : 0.875157612781005 --> Family: # 8 FV at Mutated Child #1 at Generation # 42 : 0.7545247148839109 FV at Mutated Child #2 at Generation # 42 : 7.529088605521193 --> Family: # 9 FV at Mutated Child #1 at Generation # 42 : 0.8138985705839491 FV at Mutated Child #2 at Generation # 42 : 0.6811378404779103 --> Family: # 10 FV at Mutated Child #1 at Generation # 42 : 146.86848432678636 FV at Mutated Child #2 at Generation # 42 : 1.4496625023162757 --> Family: # 11 FV at Mutated Child #1 at Generation # 42 : 0.6332605477710953 FV at Mutated Child #2 at Generation # 42 : 0.6683799766297454 --> Family: # 12 FV at Mutated Child #1 at Generation # 42 : 31.994368808981736 FV at Mutated Child #2 at Generation # 42 : 6.57711856371684 --> Family: # 13 FV at Mutated Child #1 at Generation # 42 : 1.3164090281065408 FV at Mutated Child #2 at Generation # 42 : 7.172586206689231 --> Family: # 14 FV at Mutated Child #1 at Generation # 42 : 88.67275403810807 FV at Mutated Child #2 at Generation # 42 : 28.643382780308656 --> Family: # 15 FV at Mutated Child #1 at Generation # 42 : 0.8883433997814211 FV at Mutated Child #2 at Generation # 42 : 0.7616663001747217 --> Family: # 16 FV at Mutated Child #1 at Generation # 42 : 1.112386613137779 FV at Mutated Child #2 at Generation # 42 : 0.6753942944394125 --> Family: # 17 FV at Mutated Child #1 at Generation # 42 : 1.9991862492184511 FV at Mutated Child #2 at Generation # 42 : 125.3356643028045 --> Family: # 18 FV at Mutated Child #1 at Generation # 42 : 5.945869630057353 FV at Mutated Child #2 at Generation # 42 : 538.3811057362253 --> Family: # 19 FV at Mutated Child #1 at Generation # 42 : 1.0591752749618817

FV at Mutated Child #2 at Generation # 42 : 129.61305976460926 --> Family: # 20 FV at Mutated Child #1 at Generation # 42 : 2.0636458755292986 FV at Mutated Child #2 at Generation # 42 : 0.9914046248972359 --> Family: # 21 FV at Mutated Child #1 at Generation # 42 : 0.7391606111196177 FV at Mutated Child #2 at Generation # 42 : 5.4424589892872826 --> Family: # 22 FV at Mutated Child #1 at Generation # 42 : 0.6979330358553135 FV at Mutated Child #2 at Generation # 42 : 3.371009378366395 --> Family: # 23 FV at Mutated Child #1 at Generation # 42 : 0.6421919199116669 FV at Mutated Child #2 at Generation # 42 : 5.9900883754520615 --> Family: # 24 FV at Mutated Child #1 at Generation # 42 : 4.6049215253111955 FV at Mutated Child #2 at Generation # 42 : 0.8463964570457319 --> Family: # 25 FV at Mutated Child #1 at Generation # 42 : 0.95419495609846 FV at Mutated Child #2 at Generation # 42 : 0.7797340420421328 --> Family: # 26 FV at Mutated Child #1 at Generation # 42 : 0.7003683902579978 FV at Mutated Child #2 at Generation # 42 : 0.6488285039952673 --> Family: # 27 FV at Mutated Child #1 at Generation # 42 : 23.903293466762108 FV at Mutated Child #2 at Generation # 42 : 141.81268048498978 --> Family: # 28 FV at Mutated Child #1 at Generation # 42 : 29.95383525398808 FV at Mutated Child #2 at Generation # 42 : 149.23980198836512 --> Family: # 29 FV at Mutated Child #1 at Generation # 42 : 117.87175556560835 FV at Mutated Child #2 at Generation # 42 : 5.036942288836011 --> Family: # 30 FV at Mutated Child #1 at Generation # 42 : 578.6313686670085 FV at Mutated Child #2 at Generation # 42 : 25.438518147604686 --> Family: # 31 FV at Mutated Child #1 at Generation # 42 : 0.7664934107458349 FV at Mutated Child #2 at Generation # 42 : 4.777495107559792 --> Family: # 32 FV at Mutated Child #1 at Generation # 42 : 147.45173736435876 FV at Mutated Child #2 at Generation # 42 : 0.8034377884853181 --> Family: # 33 FV at Mutated Child #1 at Generation # 42 : 99.77036826610595 FV at Mutated Child #2 at Generation # 42 : 0.6323818196152702 --> Family: # 34 FV at Mutated Child #1 at Generation # 42 : 99.456731171461

FV at Mutated Child #2 at Generation # 42 : 1.8071864769402446

Ex_1_2_3 --> Family: # 35 FV at Mutated Child #1 at Generation # 42 : 3.124187642198957 FV at Mutated Child #2 at Generation # 42 : 7.581614618499756 --> Family: # 36 FV at Mutated Child #1 at Generation # 42 : 120.07724402273897 FV at Mutated Child #2 at Generation # 42 : 0.6567146195671311 --> Family: # 37 FV at Mutated Child #1 at Generation # 42 : 28.95593328703993 FV at Mutated Child #2 at Generation # 42 : 7.1839866009434505 --> Family: # 38 FV at Mutated Child #1 at Generation # 42 : 4.381366070436241 FV at Mutated Child #2 at Generation # 42 : 1.2187683958472981 --> Family: # 39 FV at Mutated Child #1 at Generation # 42 : 26.274494500299298 FV at Mutated Child #2 at Generation # 42 : 31.0212383001443 --> Family: # 40 FV at Mutated Child #1 at Generation # 42 : 83.03805414372009 FV at Mutated Child #2 at Generation # 42 : 1.2169940684146323 --> Family: # 41 FV at Mutated Child #1 at Generation # 42 : 5.1617489940724575 FV at Mutated Child #2 at Generation # 42 : 0.7167667718706086 --> Family: # 42 FV at Mutated Child #1 at Generation # 42 : 131.2902891208615 FV at Mutated Child #2 at Generation # 42 : 0.7508026227159169 --> Family: # 43 FV at Mutated Child #1 at Generation # 42 : 84.85458919182655 FV at Mutated Child #2 at Generation # 42 : 0.91882826994452 --> Family: # 44 FV at Mutated Child #1 at Generation # 42 : 31.314918741819564 FV at Mutated Child #2 at Generation # 42 : 130.35112431535447 --> Family: # 45 FV at Mutated Child #1 at Generation # 42 : 0.8428993844345193 FV at Mutated Child #2 at Generation # 42 : 89.13349623256103 --> Family: # 46 FV at Mutated Child #1 at Generation # 42 : 1.2962847096611307 FV at Mutated Child #2 at Generation # 42 : 2.9560030248969524 --> Family: # 47 FV at Mutated Child #1 at Generation # 42 : 7.529088605521193 FV at Mutated Child #2 at Generation # 42 : 0.6180469497246314 --> Family: # 48 FV at Mutated Child #1 at Generation # 42 : 0.6356229711962793 FV at Mutated Child #2 at Generation # 42 : 22.75388150026126 --> Family: # 49

localhost:8888/nbconvert/html/Desktop/Matheuristics/Ex 1 2 3.ipynb?download=false

--> Family: # 50

FV at Mutated Child #1 at Generation # 42 : 0.8773556089989569 FV at Mutated Child #2 at Generation # 42 : 1.1637611684530986

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FV at Mutated Child #1 at Generation # 42 : 1.8754635789646694
FV at Mutated Child #2 at Generation # 42 : 2413.606730287431
--> Family: # 51
FV at Mutated Child #1 at Generation # 42 : 33.77321279463266
FV at Mutated Child #2 at Generation # 42 : 1.2233370828889063
--> Family: # 52
FV at Mutated Child #1 at Generation # 42 : 539.7558802308545
FV at Mutated Child #2 at Generation # 42 : 1.3024675196558468
--> Family: # 53
FV at Mutated Child #1 at Generation # 42 : 0.6193238047646119
FV at Mutated Child #2 at Generation # 42 : 1.7007885089614372
--> Family: # 54
FV at Mutated Child #1 at Generation # 42 : 10.37757326448443
FV at Mutated Child #2 at Generation # 42 : 5.772141967469183
--> Family: # 55
FV at Mutated Child #1 at Generation # 42 : 0.8669142886376477
FV at Mutated Child #2 at Generation # 42 : 142.50779875629877
--> Family: # 56
FV at Mutated Child #1 at Generation # 42 : 28.39472232829385
FV at Mutated Child #2 at Generation # 42 : 589.4424713734453
--> Family: # 57
FV at Mutated Child #1 at Generation # 42 : 96.80462374134336
FV at Mutated Child #2 at Generation # 42 : 131.72770184946114
--> Family: # 58
FV at Mutated Child #1 at Generation # 42 : 0.713930612817054
FV at Mutated Child #2 at Generation # 42 : 28.60610083555766
--> Family: # 59
FV at Mutated Child #1 at Generation # 42 : 4.7906510380682965
FV at Mutated Child #2 at Generation # 42 : 6.211085957694763
--> Family: # 60
FV at Mutated Child #1 at Generation # 42 : 0.7074987882344512
FV at Mutated Child #2 at Generation # 42 : 0.7213760241698628
--> Family: # 61
FV at Mutated Child #1 at Generation # 42 : 6.817313843982293
FV at Mutated Child #2 at Generation # 42 : 29.722490739196193
--> Family: # 62
FV at Mutated Child #1 at Generation # 42 : 0.9605301604085668
FV at Mutated Child #2 at Generation # 42 : 31.45021256325848
--> Family: # 63
FV at Mutated Child #1 at Generation # 42 : 116.98614622334654
FV at Mutated Child #2 at Generation # 42 : 1.065586689920881
--> Family: # 64
FV at Mutated Child #1 at Generation # 42 : 0.7474805362237318
FV at Mutated Child #2 at Generation # 42 : 124.20460561965706
--> Family: # 65
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FV at Mutated Child #1 at Generation # 42 : 2.0440767650394607 FV at Mutated Child #2 at Generation # 42 : 86.2318315401133 --> Family: # 66 FV at Mutated Child #1 at Generation # 42 : 1.2202267658926278 FV at Mutated Child #2 at Generation # 42 : 0.652523488259037 --> Family: # 67 FV at Mutated Child #1 at Generation # 42 : 13.395329112554188 FV at Mutated Child #2 at Generation # 42 : 3.371009378366395 --> Family: # 68 FV at Mutated Child #1 at Generation # 42 : 549.683439906188 FV at Mutated Child #2 at Generation # 42 : 1.0591752749618817 --> Family: # 69 FV at Mutated Child #1 at Generation # 42 : 1.2663366720445097 FV at Mutated Child #2 at Generation # 42 : 1.0431303334510147 --> Family: # 70 FV at Mutated Child #1 at Generation # 42 : 6.806849643541446 FV at Mutated Child #2 at Generation # 42 : 0.6888563037730879 --> Family: # 71 FV at Mutated Child #1 at Generation # 42 : 1.8268605336712778 FV at Mutated Child #2 at Generation # 42 : 5.155466383755847 --> Family: # 72 FV at Mutated Child #1 at Generation # 42 : 30.785852693973798 FV at Mutated Child #2 at Generation # 42 : 586.0447412580593 --> Family: # 73 FV at Mutated Child #1 at Generation # 42 : 3.2244050819104517 FV at Mutated Child #2 at Generation # 42 : 6.310711200665731 --> Family: # 74 FV at Mutated Child #1 at Generation # 42 : 0.6693578585409826 FV at Mutated Child #2 at Generation # 42 : 0.6315628644156005 --> Family: # 75 FV at Mutated Child #1 at Generation # 42 : 96.69943049192726 FV at Mutated Child #2 at Generation # 42 : 5.106460488318924 --> Family: # 76 FV at Mutated Child #1 at Generation # 42 : 120.34165555515351 FV at Mutated Child #2 at Generation # 42 : 8.156589264530163 --> Family: # 77 FV at Mutated Child #1 at Generation # 42 : 5.584055271223863 FV at Mutated Child #2 at Generation # 42 : 1.2663366720445097 --> Family: # 78 FV at Mutated Child #1 at Generation # 42 : 601.351954888952 FV at Mutated Child #2 at Generation # 42 : 0.6693837077625154 --> Family: # 79 FV at Mutated Child #1 at Generation # 42 : 4.565342158920692 FV at Mutated Child #2 at Generation # 42 : 6.221029462809315 --> Family: # 80

FV at Mutated Child #1 at Generation # 42 : 7.151055352199879

FV at Mutated Child #2 at Generation # 42 : 0.7088162510247016 --> Generation: # 43 --> Family: # 1 FV at Mutated Child #1 at Generation # 43 : 3.973355938806799 FV at Mutated Child #2 at Generation # 43 : 40.0109876905728 --> Family: # 2 FV at Mutated Child #1 at Generation # 43 : 30.140984730468105 FV at Mutated Child #2 at Generation # 43 : 110.14355698162016 --> Family: # 3 FV at Mutated Child #1 at Generation # 43 : 3.647785594271209 FV at Mutated Child #2 at Generation # 43 : 4.0110754059121625 --> Family: # 4 FV at Mutated Child #1 at Generation # 43 : 3.55142266989386 FV at Mutated Child #2 at Generation # 43 : 12.048366884039629 --> Family: # 5 FV at Mutated Child #1 at Generation # 43 : 147.00773832557996 FV at Mutated Child #2 at Generation # 43 : 42.120407586883886 --> Family: # 6 FV at Mutated Child #1 at Generation # 43 : 1.3572228361775132 FV at Mutated Child #2 at Generation # 43 : 0.9222312944217689 --> Family: # 7 FV at Mutated Child #1 at Generation # 43 : 154.9075095241013 FV at Mutated Child #2 at Generation # 43 : 44.1526877811866 --> Family: # 8 FV at Mutated Child #1 at Generation # 43 : 154.9075095241013 FV at Mutated Child #2 at Generation # 43 : 52715.1842080284 --> Family: # 9 FV at Mutated Child #1 at Generation # 43 : 4.366428801882707 FV at Mutated Child #2 at Generation # 43 : 1.5330137240978159 --> Family: # 10 FV at Mutated Child #1 at Generation # 43 : 34.399957793228594 FV at Mutated Child #2 at Generation # 43 : 15.736117682352416 --> Family: # 11 FV at Mutated Child #1 at Generation # 43 : 159.86806057271366 FV at Mutated Child #2 at Generation # 43 : 2.1040286013415437 --> Family: # 12 FV at Mutated Child #1 at Generation # 43 : 2.9658338290148842 FV at Mutated Child #2 at Generation # 43 : 11.523548938046622 --> Family: # 13 FV at Mutated Child #1 at Generation # 43 : 2.955538196445434 FV at Mutated Child #2 at Generation # 43 : 3.0489350829146287 --> Family: # 14 FV at Mutated Child #1 at Generation # 43 : 1.488290331481053 FV at Mutated Child #2 at Generation # 43 : 1.565486539794728 --> Family: # 15

FV at Mutated Child #1 at Generation # 43 : 166.09709679290927

FV at Mutated Child #2 at Generation # 43 : 10.641748244926735 --> Family: # 16 FV at Mutated Child #1 at Generation # 43 : 0.8112516662320832 FV at Mutated Child #2 at Generation # 43 : 1.5029391429479135 --> Family: # 17 FV at Mutated Child #1 at Generation # 43 : 1.787659668972828 FV at Mutated Child #2 at Generation # 43 : 635.3782986194122 --> Family: # 18 FV at Mutated Child #1 at Generation # 43 : 22.193859659426845 FV at Mutated Child #2 at Generation # 43 : 3.383423774528369 --> Family: # 19 FV at Mutated Child #1 at Generation # 43 : 154.22381725205997 FV at Mutated Child #2 at Generation # 43 : 0.8579943184031148 --> Family: # 20 FV at Mutated Child #1 at Generation # 43 : 7.561759013096665 FV at Mutated Child #2 at Generation # 43 : 1.1755019010604546 --> Family: # 21 FV at Mutated Child #1 at Generation # 43 : 42.75410934802955 FV at Mutated Child #2 at Generation # 43 : 585.9954603132076 --> Family: # 22 FV at Mutated Child #1 at Generation # 43 : 1.1997825631871823 FV at Mutated Child #2 at Generation # 43 : 0.8476756568062931 --> Family: # 23 FV at Mutated Child #1 at Generation # 43 : 1.1755019010604546 FV at Mutated Child #2 at Generation # 43 : 3.195062626666118 --> Family: # 24 FV at Mutated Child #1 at Generation # 43 : 2.6803667823803266 FV at Mutated Child #2 at Generation # 43 : 28.446529601851253 --> Family: # 25 FV at Mutated Child #1 at Generation # 43 : 31.618168217209423 FV at Mutated Child #2 at Generation # 43 : 1.3428825990436843 --> Family: # 26 FV at Mutated Child #1 at Generation # 43 : 1.2834708831716877 FV at Mutated Child #2 at Generation # 43 : 593.6409562547586 --> Family: # 27 FV at Mutated Child #1 at Generation # 43 : 2526.147918420248 FV at Mutated Child #2 at Generation # 43 : 1.9057908883632062 --> Family: # 28 FV at Mutated Child #1 at Generation # 43 : 2.948351826503538 FV at Mutated Child #2 at Generation # 43 : 1.1680262600922524 --> Family: # 29 FV at Mutated Child #1 at Generation # 43 : 4.117436674475461 FV at Mutated Child #2 at Generation # 43 : 145.35500653012664 --> Family: # 30 FV at Mutated Child #1 at Generation # 43 : 1.3380690834268223 FV at Mutated Child #2 at Generation # 43 : 11.31524519317895

--> Family: # 31

FV at Mutated Child #1 at Generation # 43 : 2.7148070654362817 FV at Mutated Child #2 at Generation # 43 : 9.109957962446302

--> Family: # 32

FV at Mutated Child #1 at Generation # 43 : 580.2621088728173 FV at Mutated Child #2 at Generation # 43 : 2.8816160665702886

--> Family: # 33

FV at Mutated Child #1 at Generation # 43 : 11.840857991114447 FV at Mutated Child #2 at Generation # 43 : 1.0487202611718263

--> Family: # 34

FV at Mutated Child #1 at Generation # 43 : 30.948452603066002 FV at Mutated Child #2 at Generation # 43 : 11.460403619710386

--> Family: # 35

FV at Mutated Child #1 at Generation # 43 : 0.8112516662320832 FV at Mutated Child #2 at Generation # 43 : 33.83732803222683 --> Family: # 36

FV at Mutated Child #1 at Generation # 43 : 4.57624251615112 FV at Mutated Child #2 at Generation # 43 : 1.5185809836702955 --> Family: # 37

FV at Mutated Child #1 at Generation # 43 : 621.9562251791193 FV at Mutated Child #2 at Generation # 43 : 572.7246014060136 --> Family: # 38

FV at Mutated Child #1 at Generation # 43 : 44.905032106372815 FV at Mutated Child #2 at Generation # 43 : 1.2255226144933586

--> Family: # 39

FV at Mutated Child #1 at Generation # 43 : 12.095105104386885 FV at Mutated Child #2 at Generation # 43 : 1.5220735409000894 --> Family: # 40

FV at Mutated Child #1 at Generation # 43 : 34.399957793228594 FV at Mutated Child #2 at Generation # 43 : 2.948351826503538 --> Family: # 41

FV at Mutated Child #1 at Generation # 43 : 34.5891507939285 FV at Mutated Child #2 at Generation # 43 : 2.8990819232715115 --> Family: # 42

FV at Mutated Child #1 at Generation # 43 : 38.636550318865865 FV at Mutated Child #2 at Generation # 43 : 3.4600783883940593 --> Family: # 43

FV at Mutated Child #1 at Generation # 43 : 641.2397461398965 FV at Mutated Child #2 at Generation # 43 : 4.017814003425045 --> Family: # 44

FV at Mutated Child #1 at Generation # 43 : 2474.5625087852754 FV at Mutated Child #2 at Generation # 43 : 617.6221396968068 --> Family: # 45

FV at Mutated Child #1 at Generation # 43 : 3.0633050105217934 FV at Mutated Child #2 at Generation # 43 : 39.94745066595097 --> Family: # 46

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FV at Mutated Child #1 at Generation # 43 : 32.99699851740523
FV at Mutated Child #2 at Generation # 43 : 11.124237413421149
--> Family: # 47
FV at Mutated Child #1 at Generation # 43 : 0.8684527219054122
FV at Mutated Child #2 at Generation # 43 : 634.4597643009437
--> Family: # 48
FV at Mutated Child #1 at Generation # 43 : 11.31847017436774
FV at Mutated Child #2 at Generation # 43 : 1.0294614448255368
--> Family: # 49
FV at Mutated Child #1 at Generation # 43 : 6.443434008324042
FV at Mutated Child #2 at Generation # 43 : 31.754246201075606
--> Family: # 50
FV at Mutated Child #1 at Generation # 43 : 3.297791885283818
FV at Mutated Child #2 at Generation # 43 : 5.303060641009543
--> Family: # 51
FV at Mutated Child #1 at Generation # 43 : 614.6347048288914
FV at Mutated Child #2 at Generation # 43 : 22.533612420980205
--> Family: # 52
FV at Mutated Child #1 at Generation # 43 : 30.327387641541254
FV at Mutated Child #2 at Generation # 43 : 34.45370405058985
--> Family: # 53
FV at Mutated Child #1 at Generation # 43 : 1.6643704710695144
FV at Mutated Child #2 at Generation # 43 : 38.275797528184334
--> Family: # 54
FV at Mutated Child #1 at Generation # 43 : 1.2890678112882212
FV at Mutated Child #2 at Generation # 43 : 8.851869311883679
--> Family: # 55
FV at Mutated Child #1 at Generation # 43 : 2.0202153115923367
FV at Mutated Child #2 at Generation # 43 : 20.78477040050647
--> Family: # 56
FV at Mutated Child #1 at Generation # 43 : 1.0360554977339715
FV at Mutated Child #2 at Generation # 43 : 148.36091007512846
--> Family: # 57
FV at Mutated Child #1 at Generation # 43 : 3.087143612817339
FV at Mutated Child #2 at Generation # 43 : 12.887682347813442
--> Family: # 58
FV at Mutated Child #1 at Generation # 43 : 10.043571009269293
FV at Mutated Child #2 at Generation # 43 : 614.3362364777457
--> Family: # 59
FV at Mutated Child #1 at Generation # 43 : 1.931998938241711
FV at Mutated Child #2 at Generation # 43 : 1.3160229699532275
--> Family: # 60
FV at Mutated Child #1 at Generation # 43 : 3.1843019994778095
FV at Mutated Child #2 at Generation # 43 : 5.775584482493904
--> Family: # 61
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FV at Mutated Child #1 at Generation # 43 : 1.4806141923920497 FV at Mutated Child #2 at Generation # 43 : 0.9222312944217689 --> Family: # 62 FV at Mutated Child #1 at Generation # 43 : 3.9599184361651347 FV at Mutated Child #2 at Generation # 43 : 3.1402473810359695 --> Family: # 63 FV at Mutated Child #1 at Generation # 43 : 147.19606205363263 FV at Mutated Child #2 at Generation # 43 : 44.63725305041412 --> Family: # 64 FV at Mutated Child #1 at Generation # 43 : 140.76468397620243 FV at Mutated Child #2 at Generation # 43 : 1.6071738478307154 --> Family: # 65 FV at Mutated Child #1 at Generation # 43 : 7.931643481243869 FV at Mutated Child #2 at Generation # 43 : 1.0502328871885385 --> Family: # 66 FV at Mutated Child #1 at Generation # 43 : 34.83711866571387 FV at Mutated Child #2 at Generation # 43 : 133.46828499333057 --> Family: # 67 FV at Mutated Child #1 at Generation # 43 : 2.295333370068643 FV at Mutated Child #2 at Generation # 43 : 10.244690511352374 --> Family: # 68 FV at Mutated Child #1 at Generation # 43 : 2.5301285655980728 FV at Mutated Child #2 at Generation # 43 : 0.8200820685272765 --> Family: # 69 FV at Mutated Child #1 at Generation # 43 : 0.8112516662320832 FV at Mutated Child #2 at Generation # 43 : 3.600958302493744 --> Family: # 70 FV at Mutated Child #1 at Generation # 43 : 1.2313796401573551 FV at Mutated Child #2 at Generation # 43 : 9.866126549138437 --> Family: # 71 FV at Mutated Child #1 at Generation # 43 : 38.442041607570175 FV at Mutated Child #2 at Generation # 43 : 31.896295110181793 --> Family: # 72 FV at Mutated Child #1 at Generation # 43 : 5.910612801952912 FV at Mutated Child #2 at Generation # 43 : 3.649466629366951 --> Family: # 73 FV at Mutated Child #1 at Generation # 43 : 31.673016844879662 FV at Mutated Child #2 at Generation # 43 : 2.0965169738524914 --> Family: # 74 FV at Mutated Child #1 at Generation # 43 : 3.3538437450358334 FV at Mutated Child #2 at Generation # 43 : 3.4856241916673656 --> Family: # 75 FV at Mutated Child #1 at Generation # 43 : 1.428266358868536 FV at Mutated Child #2 at Generation # 43 : 2483.6572713867417 --> Family: # 76

FV at Mutated Child #1 at Generation # 43 : 44.15318514820158

FV at Mutated Child #2 at Generation # 43 : 4.3248627385947565 --> Family: # 77 FV at Mutated Child #1 at Generation # 43 : 12.685596625615721 FV at Mutated Child #2 at Generation # 43 : 38.09724205591513 --> Family: # 78 FV at Mutated Child #1 at Generation # 43 : 35.916902437710945 FV at Mutated Child #2 at Generation # 43 : 36.70669660187579 --> Family: # 79 FV at Mutated Child #1 at Generation # 43 : 7.277570377910431 FV at Mutated Child #2 at Generation # 43 : 1.2149008920611872 --> Family: # 80 FV at Mutated Child #1 at Generation # 43 : 33.09280224064485 FV at Mutated Child #2 at Generation # 43 : 2.8033003578194817 --> Generation: # 44 --> Family: # 1 FV at Mutated Child #1 at Generation # 44 : 31.928565141753044 FV at Mutated Child #2 at Generation # 44 : 30.396061948135603 --> Family: # 2 FV at Mutated Child #1 at Generation # 44 : 29.74688590074032 FV at Mutated Child #2 at Generation # 44 : 139.1394632363835 --> Family: # 3 FV at Mutated Child #1 at Generation # 44 : 2.159839184646223 FV at Mutated Child #2 at Generation # 44 : 3.9663840486873227 --> Family: # 4 FV at Mutated Child #1 at Generation # 44 : 515.8914312903818 FV at Mutated Child #2 at Generation # 44 : 2.7879843727064104 --> Family: # 5 FV at Mutated Child #1 at Generation # 44 : 602.3171241773681 FV at Mutated Child #2 at Generation # 44 : 7.825790324528581 --> Family: # 6 FV at Mutated Child #1 at Generation # 44 : 0.6933952018197878 FV at Mutated Child #2 at Generation # 44 : 1.5012698533010216 --> Family: # 7 FV at Mutated Child #1 at Generation # 44 : 34.054839046123945 FV at Mutated Child #2 at Generation # 44 : 0.6559312014203265 --> Family: # 8 FV at Mutated Child #1 at Generation # 44 : 34.10338049909016 FV at Mutated Child #2 at Generation # 44 : 0.756051005080608 --> Family: # 9 FV at Mutated Child #1 at Generation # 44 : 1.135036057689239 FV at Mutated Child #2 at Generation # 44 : 138.23323131960177 --> Family: # 10 FV at Mutated Child #1 at Generation # 44 : 1.8868804440387263 FV at Mutated Child #2 at Generation # 44 : 27.114281113689543 --> Family: # 11

FV at Mutated Child #1 at Generation # 44 : 1.295673595884755

FV at Mutated Child #2 at Generation # 44 : 4.050228728159814 --> Family: # 12 FV at Mutated Child #1 at Generation # 44 : 1.112386613137779 FV at Mutated Child #2 at Generation # 44 : 1.1263360009731058 --> Family: # 13 FV at Mutated Child #1 at Generation # 44 : 532.6532923997348 FV at Mutated Child #2 at Generation # 44 : 2435.0862541110887 --> Family: # 14 FV at Mutated Child #1 at Generation # 44 : 0.7873181393020134 FV at Mutated Child #2 at Generation # 44 : 1.0072583837986486 --> Family: # 15 FV at Mutated Child #1 at Generation # 44 : 0.9083162832569732 FV at Mutated Child #2 at Generation # 44 : 19.1210425976525 --> Family: # 16 FV at Mutated Child #1 at Generation # 44 : 0.6567146195671311 FV at Mutated Child #2 at Generation # 44 : 362.2160632991847 --> Family: # 17 FV at Mutated Child #1 at Generation # 44 : 0.6254638334230455 FV at Mutated Child #2 at Generation # 44 : 33.954308297217445 --> Family: # 18 FV at Mutated Child #1 at Generation # 44 : 118.04801203578863 FV at Mutated Child #2 at Generation # 44 : 1.3874336073453768 --> Family: # 19 FV at Mutated Child #1 at Generation # 44 : 0.753831785159645 FV at Mutated Child #2 at Generation # 44 : 0.7305497903635559 --> Family: # 20 FV at Mutated Child #1 at Generation # 44 : 147.0987886053674 FV at Mutated Child #2 at Generation # 44 : 4.660694787343215 --> Family: # 21 FV at Mutated Child #1 at Generation # 44 : 1.8793760155326558 FV at Mutated Child #2 at Generation # 44 : 0.6863365240266511 --> Family: # 22 FV at Mutated Child #1 at Generation # 44 : 23.260446948780054 FV at Mutated Child #2 at Generation # 44 : 2.243292621880048 --> Family: # 23 FV at Mutated Child #1 at Generation # 44 : 0.6326001192960554 FV at Mutated Child #2 at Generation # 44 : 147.4595251662004 --> Family: # 24 FV at Mutated Child #1 at Generation # 44 : 127.51486819216349 FV at Mutated Child #2 at Generation # 44 : 137.5739951184092 --> Family: # 25 FV at Mutated Child #1 at Generation # 44 : 132.75143077876498 FV at Mutated Child #2 at Generation # 44 : 114.54451608896996 --> Family: # 26 FV at Mutated Child #1 at Generation # 44 : 5.793794214112308 FV at Mutated Child #2 at Generation # 44 : 0.9997799835963105

--> Family: # 27

FV at Mutated Child #1 at Generation # 44 : 7.124265104241638 FV at Mutated Child #2 at Generation # 44 : 0.8498012319606438 --> Family: # 28

FV at Mutated Child #1 at Generation # 44 : 1.0273834879369375 FV at Mutated Child #2 at Generation # 44 : 5.334384899850332 --> Family: # 29

FV at Mutated Child #1 at Generation # 44 : 28.73542225584418 FV at Mutated Child #2 at Generation # 44 : 18.84111340823135

--> Family: # 30

FV at Mutated Child #1 at Generation # 44 : 2239.3578111875217 FV at Mutated Child #2 at Generation # 44 : 0.6382784129558824 --> Family: # 31

FV at Mutated Child #1 at Generation # 44 : 0.6173896172995547 FV at Mutated Child #2 at Generation # 44 : 0.6753942944394125 --> Family: # 32

FV at Mutated Child #1 at Generation # 44 : 1.173147164017632 FV at Mutated Child #2 at Generation # 44 : 133.81439393673745 --> Family: # 33

FV at Mutated Child #1 at Generation # 44 : 1.0704003809110598 FV at Mutated Child #2 at Generation # 44 : 3.2244050819104517 --> Family: # 34

FV at Mutated Child #1 at Generation # 44 : 0.6851911119655145 FV at Mutated Child #2 at Generation # 44 : 1.2475812722205362 --> Family: # 35

FV at Mutated Child #1 at Generation # 44 : 2.9138114359772933 FV at Mutated Child #2 at Generation # 44 : 0.7448644417610379 --> Family: # 36

FV at Mutated Child #1 at Generation # 44 : 3.4639961290099635 FV at Mutated Child #2 at Generation # 44 : 0.6390653943827583 --> Family: # 37

FV at Mutated Child #1 at Generation # 44 : 1.003504380105481 FV at Mutated Child #2 at Generation # 44 : 1.3575519529876807 --> Family: # 38

FV at Mutated Child #1 at Generation # 44 : 0.7207790639200068 FV at Mutated Child #2 at Generation # 44 : 90.53953690960178 --> Family: # 39

FV at Mutated Child #1 at Generation # 44 : 8.418967248376346 FV at Mutated Child #2 at Generation # 44 : 4.962625404320103 --> Family: # 40

FV at Mutated Child #1 at Generation # 44 : 3.2131855444673487
FV at Mutated Child #2 at Generation # 44 : 8.51853395380185
--> Family: # 41

FV at Mutated Child #1 at Generation # 44 : 4.390110498023599
FV at Mutated Child #2 at Generation # 44 : 1.1706993747541514
--> Family: # 42

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FV at Mutated Child #1 at Generation # 44 : 1.0006478366786467
FV at Mutated Child #2 at Generation # 44 : 427.7574403344638
--> Family: # 43
FV at Mutated Child #1 at Generation # 44 : 0.714272306675653
FV at Mutated Child #2 at Generation # 44 : 0.7903030535759872
--> Family: # 44
FV at Mutated Child #1 at Generation # 44 : 23.095166279331348
FV at Mutated Child #2 at Generation # 44 : 1.2648589484339778
--> Family: # 45
FV at Mutated Child #1 at Generation # 44 : 548.035046808552
FV at Mutated Child #2 at Generation # 44 : 146.09251666656857
--> Family: # 46
FV at Mutated Child #1 at Generation # 44 : 0.7295227036959819
FV at Mutated Child #2 at Generation # 44 : 4.719481605089789
--> Family: # 47
FV at Mutated Child #1 at Generation # 44 : 486.3680986460321
FV at Mutated Child #2 at Generation # 44 : 148.8696326292676
--> Family: # 48
FV at Mutated Child #1 at Generation # 44 : 0.6834170680484983
FV at Mutated Child #2 at Generation # 44 : 11.717442220328483
--> Family: # 49
FV at Mutated Child #1 at Generation # 44 : 1.296721010930476
FV at Mutated Child #2 at Generation # 44 : 1.2377003303055962
--> Family: # 50
FV at Mutated Child #1 at Generation # 44 : 134.46691267777757
FV at Mutated Child #2 at Generation # 44 : 2.62813778424536
--> Family: # 51
FV at Mutated Child #1 at Generation # 44 : 0.6837794505870113
FV at Mutated Child #2 at Generation # 44 : 7.020409547466217
--> Family: # 52
FV at Mutated Child #1 at Generation # 44 : 22.342108932990154
FV at Mutated Child #2 at Generation # 44 : 32.798960689876345
--> Family: # 53
FV at Mutated Child #1 at Generation # 44 : 601.5049802998132
FV at Mutated Child #2 at Generation # 44 : 116.90906363830914
--> Family: # 54
FV at Mutated Child #1 at Generation # 44 : 0.7003683902579978
FV at Mutated Child #2 at Generation # 44 : 0.740413749654269
--> Family: # 55
FV at Mutated Child #1 at Generation # 44 : 33.53569413063966
FV at Mutated Child #2 at Generation # 44 : 2.616592168034657
--> Family: # 56
FV at Mutated Child #1 at Generation # 44 : 24.225039139632212
FV at Mutated Child #2 at Generation # 44 : 571.0567784854867
--> Family: # 57
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FV at Mutated Child #1 at Generation # 44 : 0.7439511677772116 FV at Mutated Child #2 at Generation # 44 : 0.6283680024534566 --> Family: # 58 FV at Mutated Child #1 at Generation # 44 : 127.29252254085758 FV at Mutated Child #2 at Generation # 44 : 27.329281912515665 --> Family: # 59 FV at Mutated Child #1 at Generation # 44 : 1.1822143842040163 FV at Mutated Child #2 at Generation # 44 : 6.481769058887578 --> Family: # 60 FV at Mutated Child #1 at Generation # 44 : 5.814426326500287 FV at Mutated Child #2 at Generation # 44 : 139.96097198420262 --> Family: # 61 FV at Mutated Child #1 at Generation # 44 : 6.411981040546539 FV at Mutated Child #2 at Generation # 44 : 28.662930484885887 --> Family: # 62 FV at Mutated Child #1 at Generation # 44 : 4.6267334112607355 FV at Mutated Child #2 at Generation # 44 : 137.67829392775974 --> Family: # 63 FV at Mutated Child #1 at Generation # 44 : 120.08217349012403 FV at Mutated Child #2 at Generation # 44 : 133.26115074463948 --> Family: # 64 FV at Mutated Child #1 at Generation # 44 : 140.14882352540891 FV at Mutated Child #2 at Generation # 44 : 35.67376787897314 --> Family: # 65 FV at Mutated Child #1 at Generation # 44 : 0.7074987882344512 FV at Mutated Child #2 at Generation # 44 : 0.8242597442070776 --> Family: # 66 FV at Mutated Child #1 at Generation # 44 : 8.910579380250022 FV at Mutated Child #2 at Generation # 44 : 5.029298608415177 --> Family: # 67 FV at Mutated Child #1 at Generation # 44 : 4.565342158920692 FV at Mutated Child #2 at Generation # 44 : 468.36167874501876 --> Family: # 68 FV at Mutated Child #1 at Generation # 44 : 478.4803449852174 FV at Mutated Child #2 at Generation # 44 : 5.768168109432929 --> Family: # 69 FV at Mutated Child #1 at Generation # 44 : 2.122298167419073 FV at Mutated Child #2 at Generation # 44 : 0.9562361702972659 --> Family: # 70 FV at Mutated Child #1 at Generation # 44 : 545.7523175562183 FV at Mutated Child #2 at Generation # 44 : 0.7907284907730565 --> Family: # 71 FV at Mutated Child #1 at Generation # 44 : 0.9736046231684853 FV at Mutated Child #2 at Generation # 44 : 0.9997799835963105

FV at Mutated Child #1 at Generation # 44 : 16.49428860546496

--> Family: # 72

Ex 1 2 3 FV at Mutated Child #2 at Generation # 44 : 1.0079286132848282 --> Family: # 73 FV at Mutated Child #1 at Generation # 44 : 7.436649725348102 FV at Mutated Child #2 at Generation # 44 : 0.9056555491487503 --> Family: # 74 FV at Mutated Child #1 at Generation # 44 : 1.2599193682959622 FV at Mutated Child #2 at Generation # 44 : 8.253977454892187 --> Family: # 75 FV at Mutated Child #1 at Generation # 44 : 0.6966900654397411 FV at Mutated Child #2 at Generation # 44 : 31.83431061662614 --> Family: # 76 FV at Mutated Child #1 at Generation # 44 : 1.0617953055776905 FV at Mutated Child #2 at Generation # 44 : 0.6193238047646119 --> Family: # 77 FV at Mutated Child #1 at Generation # 44 : 31.585915004125816 FV at Mutated Child #2 at Generation # 44 : 0.91731724752557 --> Family: # 78 FV at Mutated Child #1 at Generation # 44 : 0.6546502376556965 FV at Mutated Child #2 at Generation # 44 : 1.1787032391570174 --> Family: # 79 FV at Mutated Child #1 at Generation # 44 : 28.029454404800713 FV at Mutated Child #2 at Generation # 44 : 2.246857427427833 --> Family: # 80 FV at Mutated Child #1 at Generation # 44 : 4.903886079757433 FV at Mutated Child #2 at Generation # 44 : 0.9056555491487503 --> Generation: # 45 --> Family: # 1 FV at Mutated Child #1 at Generation # 45 : 10.272075412896509 FV at Mutated Child #2 at Generation # 45 : 4.318090253850569 --> Family: # 2 FV at Mutated Child #1 at Generation # 45 : 24.141460101976268 FV at Mutated Child #2 at Generation # 45 : 3.2453719200858764 --> Family: # 3 FV at Mutated Child #1 at Generation # 45 : 30.140984730468105 FV at Mutated Child #2 at Generation # 45 : 139.7952653866139 --> Family: # 4 FV at Mutated Child #1 at Generation # 45 : 44.21644920777326 FV at Mutated Child #2 at Generation # 45 : 1.5183358596292185 --> Family: # 5 FV at Mutated Child #1 at Generation # 45 : 1.46388437186798 FV at Mutated Child #2 at Generation # 45 : 3.8853340975606763 --> Family: # 6 FV at Mutated Child #1 at Generation # 45 : 1.3428825990436843 FV at Mutated Child #2 at Generation # 45 : 153.2183659938832 --> Family: # 7

FV at Mutated Child #1 at Generation # 45 : 161.47032804520083

FV at Mutated Child #2 at Generation # 45 : 629.6367880528462 --> Family: # 8 FV at Mutated Child #1 at Generation # 45 : 1.843946924120583 FV at Mutated Child #2 at Generation # 45 : 2.2751607380699976 --> Family: # 9 FV at Mutated Child #1 at Generation # 45 : 4.703010903996473 FV at Mutated Child #2 at Generation # 45 : 6.279315641351293 --> Family: # 10 FV at Mutated Child #1 at Generation # 45 : 159.8747884938507 FV at Mutated Child #2 at Generation # 45 : 19.47904855203713 --> Family: # 11 FV at Mutated Child #1 at Generation # 45 : 0.7377899088760034 FV at Mutated Child #2 at Generation # 45 : 7.044178511088337 --> Family: # 12 FV at Mutated Child #1 at Generation # 45 : 6.120978443815023 FV at Mutated Child #2 at Generation # 45 : 0.877451354592566 --> Family: # 13 FV at Mutated Child #1 at Generation # 45 : 2.2213591642826316 FV at Mutated Child #2 at Generation # 45 : 10.393225214953798 --> Family: # 14 FV at Mutated Child #1 at Generation # 45 : 1.2277390481816974 FV at Mutated Child #2 at Generation # 45 : 153.39480945151024 --> Family: # 15 FV at Mutated Child #1 at Generation # 45 : 3.6983279273216136 FV at Mutated Child #2 at Generation # 45 : 6.542998527940073 --> Family: # 16 FV at Mutated Child #1 at Generation # 45 : 0.8594888259340535 FV at Mutated Child #2 at Generation # 45 : 27.98037526672016 --> Family: # 17 FV at Mutated Child #1 at Generation # 45 : 2.6391488598698998 FV at Mutated Child #2 at Generation # 45 : 1.9570175722474286 --> Family: # 18 FV at Mutated Child #1 at Generation # 45 : 594.2952086756969 FV at Mutated Child #2 at Generation # 45 : 22.38902359576828 --> Family: # 19 FV at Mutated Child #1 at Generation # 45 : 1.495255691509383 FV at Mutated Child #2 at Generation # 45 : 558.1141031426203 --> Family: # 20 FV at Mutated Child #1 at Generation # 45 : 8.78581524757397 FV at Mutated Child #2 at Generation # 45 : 152.80996483994275 --> Family: # 21 FV at Mutated Child #1 at Generation # 45 : 149.57051651049332 FV at Mutated Child #2 at Generation # 45 : 161.7289609517036 --> Family: # 22 FV at Mutated Child #1 at Generation # 45 : 156.113470307603 FV at Mutated Child #2 at Generation # 45 : 1.6664755243487823

--> Family: # 23

FV at Mutated Child #1 at Generation # 45 : 22.20943527018688 FV at Mutated Child #2 at Generation # 45 : 3.8426616362035966

--> Family: # 24

FV at Mutated Child #1 at Generation # 45 : 0.8226556272472063 FV at Mutated Child #2 at Generation # 45 : 1.6784622834289318

--> Family: # 25

FV at Mutated Child #1 at Generation # 45 : 2.8439206718882755 FV at Mutated Child #2 at Generation # 45 : 141.1047153437678

--> Family: # 26

FV at Mutated Child #1 at Generation # 45 : 1.1862623582108611 FV at Mutated Child #2 at Generation # 45 : 16.662596506747967

--> Family: # 27

FV at Mutated Child #1 at Generation # 45 : 609.5066932337754 FV at Mutated Child #2 at Generation # 45 : 2.38438886967091

--> Family: # 28

FV at Mutated Child #1 at Generation # 45 : 2.8402807336665967 FV at Mutated Child #2 at Generation # 45 : 12.988831017813325

--> Family: # 29

FV at Mutated Child #1 at Generation # 45 : 3.424111039425651 FV at Mutated Child #2 at Generation # 45 : 1.4210876155029837 --> Family: # 30

FV at Mutated Child #1 at Generation # 45 : 5.86105801363594 FV at Mutated Child #2 at Generation # 45 : 1.1205601563941636 --> Family: # 31

FV at Mutated Child #1 at Generation # 45 : 139.85114594287322 FV at Mutated Child #2 at Generation # 45 : 1.174641162225814 --> Family: # 32

FV at Mutated Child #1 at Generation # 45 : 10.27198450696166 FV at Mutated Child #2 at Generation # 45 : 3.2789607913794883 --> Family: # 33

FV at Mutated Child #1 at Generation # 45 : 10.244690511352374 FV at Mutated Child #2 at Generation # 45 : 1.9836568123262088 --> Family: # 34

FV at Mutated Child #1 at Generation # 45 : 0.9626995080390791 FV at Mutated Child #2 at Generation # 45 : 2.472006296182687 --> Family: # 35

FV at Mutated Child #1 at Generation # 45 : 3.3538437450358334 FV at Mutated Child #2 at Generation # 45 : 6.443434008324042 --> Family: # 36

FV at Mutated Child #1 at Generation # 45 : 1.2115025100310255 FV at Mutated Child #2 at Generation # 45 : 137.3470180884998 --> Family: # 37

FV at Mutated Child #1 at Generation # 45 : 12.284498107108274 FV at Mutated Child #2 at Generation # 45 : 7.567121351936537 --> Family: # 38

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FV at Mutated Child #1 at Generation # 45 : 10.67171498075378
FV at Mutated Child #2 at Generation # 45 : 2.7430115500435823
--> Family: # 39
FV at Mutated Child #1 at Generation # 45 : 19.052891396650658
FV at Mutated Child #2 at Generation # 45 : 0.8476756568062931
--> Family: # 40
FV at Mutated Child #1 at Generation # 45 : 9.09746761321159
FV at Mutated Child #2 at Generation # 45 : 616.8734488458102
--> Family: # 41
FV at Mutated Child #1 at Generation # 45 : 39.45452442533933
FV at Mutated Child #2 at Generation # 45 : 7.34970879943917
--> Family: # 42
FV at Mutated Child #1 at Generation # 45 : 41.337644383766
FV at Mutated Child #2 at Generation # 45 : 0.9422730405773128
--> Family: # 43
FV at Mutated Child #1 at Generation # 45 : 105.14531886007612
FV at Mutated Child #2 at Generation # 45 : 10.27198450696166
--> Family: # 44
FV at Mutated Child #1 at Generation # 45 : 6.881460454526085
FV at Mutated Child #2 at Generation # 45 : 1.6187094688090076
--> Family: # 45
FV at Mutated Child #1 at Generation # 45 : 141.78615951475467
FV at Mutated Child #2 at Generation # 45 : 2.7148070654362817
--> Family: # 46
FV at Mutated Child #1 at Generation # 45 : 10.210715825284145
FV at Mutated Child #2 at Generation # 45 : 2.407021930711176
--> Family: # 47
FV at Mutated Child #1 at Generation # 45 : 28.87616182182689
FV at Mutated Child #2 at Generation # 45 : 12.530162395490848
--> Family: # 48
FV at Mutated Child #1 at Generation # 45 : 32.033002694920185
FV at Mutated Child #2 at Generation # 45 : 37.500142030815816
--> Family: # 49
FV at Mutated Child #1 at Generation # 45 : 6.542785047827474
FV at Mutated Child #2 at Generation # 45 : 10.393225214953798
--> Family: # 50
FV at Mutated Child #1 at Generation # 45 : 11.620159771732572
FV at Mutated Child #2 at Generation # 45 : 3.0489350829146287
--> Family: # 51
FV at Mutated Child #1 at Generation # 45 : 1.3095706823047575
FV at Mutated Child #2 at Generation # 45 : 137.18278113216786
--> Family: # 52
FV at Mutated Child #1 at Generation # 45 : 7.719676286147125
FV at Mutated Child #2 at Generation # 45 : 1.915096570608649
--> Family: # 53
```

FV at Mutated Child #1 at Generation # 45 : 39.606824057481404 FV at Mutated Child #2 at Generation # 45 : 3.8588043158356617 --> Family: # 54 FV at Mutated Child #1 at Generation # 45 : 1.6784622834289318 FV at Mutated Child #2 at Generation # 45 : 1.8706635120430501 --> Family: # 55 FV at Mutated Child #1 at Generation # 45 : 1.9762050895205738 FV at Mutated Child #2 at Generation # 45 : 2500.005004914534 --> Family: # 56 FV at Mutated Child #1 at Generation # 45 : 1960.2694033958053 FV at Mutated Child #2 at Generation # 45 : 2.291607258270484 --> Family: # 57 FV at Mutated Child #1 at Generation # 45 : 2543.0404483292123 FV at Mutated Child #2 at Generation # 45 : 5.055466512705 --> Family: # 58 FV at Mutated Child #1 at Generation # 45 : 163.20486738670104 FV at Mutated Child #2 at Generation # 45 : 1.7123208732578994 --> Family: # 59 FV at Mutated Child #1 at Generation # 45 : 154.97662108503096 FV at Mutated Child #2 at Generation # 45 : 1.894748402271114 --> Family: # 60 FV at Mutated Child #1 at Generation # 45 : 124.50081539368401 FV at Mutated Child #2 at Generation # 45 : 5.757782499946562 --> Family: # 61 FV at Mutated Child #1 at Generation # 45 : 3.4392555075836326 FV at Mutated Child #2 at Generation # 45 : 598.8379565346664 --> Family: # 62 FV at Mutated Child #1 at Generation # 45 : 156.24892941211414 FV at Mutated Child #2 at Generation # 45 : 7.201795060081615 --> Family: # 63 FV at Mutated Child #1 at Generation # 45 : 6.648135666150759 FV at Mutated Child #2 at Generation # 45 : 3.17356064078228 --> Family: # 64 FV at Mutated Child #1 at Generation # 45 : 1.4502980404187125 FV at Mutated Child #2 at Generation # 45 : 31.211722841591325 --> Family: # 65 FV at Mutated Child #1 at Generation # 45 : 5.135286034066351 FV at Mutated Child #2 at Generation # 45 : 22.90801070726516 --> Family: # 66 FV at Mutated Child #1 at Generation # 45 : 9.014269222045112 FV at Mutated Child #2 at Generation # 45 : 130.19724747192697 --> Family: # 67 FV at Mutated Child #1 at Generation # 45 : 26.317095885700574

FV at Mutated Child #2 at Generation # 45 : 5.447795649471605 --> Family: # 68

FV at Mutated Child #1 at Generation # 45 : 4.003149557862086

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FV at Mutated Child #2 at Generation # 45 : 33.74735364928308 --> Family: # 69 FV at Mutated Child #1 at Generation # 45 : 157.4695014673163 FV at Mutated Child #2 at Generation # 45 : 0.9907774418718989 --> Family: # 70 FV at Mutated Child #1 at Generation # 45 : 10.244690511352374 FV at Mutated Child #2 at Generation # 45 : 1.1634205289060575 --> Family: # 71 FV at Mutated Child #1 at Generation # 45 : 6.120978443815023 FV at Mutated Child #2 at Generation # 45 : 10.244690511352374 --> Family: # 72 FV at Mutated Child #1 at Generation # 45 : 9.895446219264885 FV at Mutated Child #2 at Generation # 45 : 4.437909610578879 --> Family: # 73 FV at Mutated Child #1 at Generation # 45 : 575.5996775148335 FV at Mutated Child #2 at Generation # 45 : 0.7304309220780956 --> Family: # 74 FV at Mutated Child #1 at Generation # 45 : 8.42764495693517 FV at Mutated Child #2 at Generation # 45 : 2.7338744681088025 --> Family: # 75 FV at Mutated Child #1 at Generation # 45 : 542.4329320250855 FV at Mutated Child #2 at Generation # 45 : 8.67568754087302 --> Family: # 76 FV at Mutated Child #1 at Generation # 45 : 4.3123953511477575 FV at Mutated Child #2 at Generation # 45 : 6.208005653813421 --> Family: # 77 FV at Mutated Child #1 at Generation # 45 : 3.088062959056586 FV at Mutated Child #2 at Generation # 45 : 34.260865106297125 --> Family: # 78 FV at Mutated Child #1 at Generation # 45 : 7.047600824950848 FV at Mutated Child #2 at Generation # 45 : 40.055842444178744 --> Family: # 79 FV at Mutated Child #1 at Generation # 45 : 1.541884713734114 FV at Mutated Child #2 at Generation # 45 : 145.37785396617656 --> Family: # 80 FV at Mutated Child #1 at Generation # 45 : 153.89894356762602 FV at Mutated Child #2 at Generation # 45 : 0.9204629065936966 --> Generation: # 46 --> Family: # 1 FV at Mutated Child #1 at Generation # 46 : 27.267607868550723 FV at Mutated Child #2 at Generation # 46 : 0.6307300611245441 --> Family: # 2 FV at Mutated Child #1 at Generation # 46 : 24.332826397719835 FV at Mutated Child #2 at Generation # 46 : 26.823177152077623 --> Family: # 3

FV at Mutated Child #1 at Generation # 46 : 0.7629028651632288

FV at Mutated Child #2 at Generation # 46 : 5.106460488318924 --> Family: # 4 FV at Mutated Child #1 at Generation # 46 : 0.6451142953276054 FV at Mutated Child #2 at Generation # 46 : 1.0065818216767057 --> Family: # 5 FV at Mutated Child #1 at Generation # 46 : 28.64577084154226 FV at Mutated Child #2 at Generation # 46 : 0.9541963934576801 --> Family: # 6 FV at Mutated Child #1 at Generation # 46 : 10.23052986990647 FV at Mutated Child #2 at Generation # 46 : 138.44368270700136 --> Family: # 7 FV at Mutated Child #1 at Generation # 46 : 107.35115487994833 FV at Mutated Child #2 at Generation # 46 : 91.85579783546878 --> Family: # 8 FV at Mutated Child #1 at Generation # 46 : 26.419646221986802 FV at Mutated Child #2 at Generation # 46 : 32.400712716852986 --> Family: # 9 FV at Mutated Child #1 at Generation # 46 : 6.106025548484551 FV at Mutated Child #2 at Generation # 46 : 4.517023185231284 --> Family: # 10 FV at Mutated Child #1 at Generation # 46 : 1.295673595884755 FV at Mutated Child #2 at Generation # 46 : 0.7688511732511936 --> Family: # 11 FV at Mutated Child #1 at Generation # 46 : 138.73047847811304 FV at Mutated Child #2 at Generation # 46 : 21.503766952952436 --> Family: # 12 FV at Mutated Child #1 at Generation # 46 : 28.39472232829385 FV at Mutated Child #2 at Generation # 46 : 31.037960611339006 --> Family: # 13 FV at Mutated Child #1 at Generation # 46 : 21.952490554839425 FV at Mutated Child #2 at Generation # 46 : 6.138766757373134 --> Family: # 14 FV at Mutated Child #1 at Generation # 46 : 1.19605513017787 FV at Mutated Child #2 at Generation # 46 : 1.0006478366786467 --> Family: # 15 FV at Mutated Child #1 at Generation # 46 : 54.570743475717954 FV at Mutated Child #2 at Generation # 46 : 36.86554744907884 --> Family: # 16 FV at Mutated Child #1 at Generation # 46 : 2.472006296182687 FV at Mutated Child #2 at Generation # 46 : 3.748015172918111 --> Family: # 17 FV at Mutated Child #1 at Generation # 46 : 2383.0157137179544 FV at Mutated Child #2 at Generation # 46 : 2.509667009234955 --> Family: # 18 FV at Mutated Child #1 at Generation # 46 : 132.32849777409172 FV at Mutated Child #2 at Generation # 46 : 132.32849777409172

--> Family: # 19

FV at Mutated Child #1 at Generation # 46 : 6.132415908557941
FV at Mutated Child #2 at Generation # 46 : 1.2377003303055962

--> Family: # 20

FV at Mutated Child #1 at Generation # 46 : 7.338730546875012 FV at Mutated Child #2 at Generation # 46 : 7.417717114795984

--> Family: # 21

FV at Mutated Child #1 at Generation # 46 : 28.43913680213241 FV at Mutated Child #2 at Generation # 46 : 0.7522850999005353

--> Family: # 22

FV at Mutated Child #1 at Generation # 46 : 5.619005947836731 FV at Mutated Child #2 at Generation # 46 : 588.0075975909438

--> Family: # 23

FV at Mutated Child #1 at Generation # 46 : 0.7117644107710934 FV at Mutated Child #2 at Generation # 46 : 0.7629028651632288 --> Family: # 24

FV at Mutated Child #1 at Generation # 46 : 1.9836568123262088 FV at Mutated Child #2 at Generation # 46 : 2.292499196030858 --> Family: # 25

FV at Mutated Child #1 at Generation # 46 : 17.813706739191936 FV at Mutated Child #2 at Generation # 46 : 1.3164090281065408 --> Family: # 26

FV at Mutated Child #1 at Generation # 46 : 4.4504414728408594 FV at Mutated Child #2 at Generation # 46 : 1.2259337248921116

--> Family: # 27

FV at Mutated Child #1 at Generation # 46 : 1.1146548853397122 FV at Mutated Child #2 at Generation # 46 : 545.0809155898006 --> Family: # 28

FV at Mutated Child #1 at Generation # 46 : 6.485902256908039 FV at Mutated Child #2 at Generation # 46 : 1.1483892919470273 --> Family: # 29

FV at Mutated Child #1 at Generation # 46 : 24.81808087747319
FV at Mutated Child #2 at Generation # 46 : 3.3335221394684376
--> Family: # 30

FV at Mutated Child #1 at Generation # 46 : 2235.083848020694 FV at Mutated Child #2 at Generation # 46 : 31.20819022529506 --> Family: # 31

FV at Mutated Child #1 at Generation # 46 : 91.76094519095282 FV at Mutated Child #2 at Generation # 46 : 0.6811378404779103 --> Family: # 32

FV at Mutated Child #1 at Generation # 46 : 0.8117807288596802 FV at Mutated Child #2 at Generation # 46 : 23.362782790109375 --> Family: # 33

FV at Mutated Child #1 at Generation # 46 : 2.303300279022567 FV at Mutated Child #2 at Generation # 46 : 12.49951603132312 --> Family: # 34

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FV at Mutated Child #1 at Generation # 46 : 0.7117644107710934
FV at Mutated Child #2 at Generation # 46 : 13.560133345641619
--> Family: # 35
FV at Mutated Child #1 at Generation # 46 : 1.572293748438058
FV at Mutated Child #2 at Generation # 46 : 462.2546658472345
--> Family: # 36
FV at Mutated Child #1 at Generation # 46 : 548.6208458137683
FV at Mutated Child #2 at Generation # 46 : 1.4878838108321717
--> Family: # 37
FV at Mutated Child #1 at Generation # 46 : 26.60377584575274
FV at Mutated Child #2 at Generation # 46 : 27.297228112622605
--> Family: # 38
FV at Mutated Child #1 at Generation # 46 : 2.3964463101413145
FV at Mutated Child #2 at Generation # 46 : 135.4288764138724
--> Family: # 39
FV at Mutated Child #1 at Generation # 46 : 4.630211049792548
FV at Mutated Child #2 at Generation # 46 : 31.340540476485796
--> Family: # 40
FV at Mutated Child #1 at Generation # 46 : 20.900633716324474
FV at Mutated Child #2 at Generation # 46 : 28.3885022043671
--> Family: # 41
FV at Mutated Child #1 at Generation # 46 : 0.6926886098480834
FV at Mutated Child #2 at Generation # 46 : 144.15227095763174
--> Family: # 42
FV at Mutated Child #1 at Generation # 46 : 1.1817988149210494
FV at Mutated Child #2 at Generation # 46 : 0.6997608675489638
--> Family: # 43
FV at Mutated Child #1 at Generation # 46 : 133.81439393673745
FV at Mutated Child #2 at Generation # 46 : 144.2527657325965
--> Family: # 44
FV at Mutated Child #1 at Generation # 46 : 1.32586505523357
FV at Mutated Child #2 at Generation # 46 : 6.427301100326923
--> Family: # 45
FV at Mutated Child #1 at Generation # 46 : 6.56270567116435
FV at Mutated Child #2 at Generation # 46 : 1.0921594459739379
--> Family: # 46
FV at Mutated Child #1 at Generation # 46 : 145.19320474785712
FV at Mutated Child #2 at Generation # 46 : 0.756051005080608
--> Family: # 47
FV at Mutated Child #1 at Generation # 46 : 125.58222041426264
FV at Mutated Child #2 at Generation # 46 : 125.02804658584691
--> Family: # 48
FV at Mutated Child #1 at Generation # 46 : 134.25254035492907
FV at Mutated Child #2 at Generation # 46 : 4.777495107559792
--> Family: # 49
```

FV at Mutated Child #1 at Generation # 46 : 3.5872779125822722 FV at Mutated Child #2 at Generation # 46 : 545.8121904722503 --> Family: # 50 FV at Mutated Child #1 at Generation # 46 : 0.6259503365710037 FV at Mutated Child #2 at Generation # 46 : 0.7058524504101736 --> Family: # 51 FV at Mutated Child #1 at Generation # 46 : 31.73725027352497 FV at Mutated Child #2 at Generation # 46 : 115.15016721088274 --> Family: # 52 FV at Mutated Child #1 at Generation # 46 : 130.80344872196108 FV at Mutated Child #2 at Generation # 46 : 24.854122090151986 --> Family: # 53 FV at Mutated Child #1 at Generation # 46 : 4.2333693590270665 FV at Mutated Child #2 at Generation # 46 : 1.3989586376064098 --> Family: # 54 FV at Mutated Child #1 at Generation # 46 : 0.9937320346555409 FV at Mutated Child #2 at Generation # 46 : 0.769036520745528 --> Family: # 55 FV at Mutated Child #1 at Generation # 46 : 156.75410797729373 FV at Mutated Child #2 at Generation # 46 : 0.7629028651632288 --> Family: # 56 FV at Mutated Child #1 at Generation # 46 : 23.660670739740077 FV at Mutated Child #2 at Generation # 46 : 19.44280287076376 --> Family: # 57 FV at Mutated Child #1 at Generation # 46 : 6.353402338516805 FV at Mutated Child #2 at Generation # 46 : 134.25254035492907 --> Family: # 58 FV at Mutated Child #1 at Generation # 46 : 0.6254638334230455 FV at Mutated Child #2 at Generation # 46 : 4.2333693590270665 --> Family: # 59 FV at Mutated Child #1 at Generation # 46 : 6.1849470382083815 FV at Mutated Child #2 at Generation # 46 : 26.83076572485283 --> Family: # 60 FV at Mutated Child #1 at Generation # 46 : 1.1090986754751264 FV at Mutated Child #2 at Generation # 46 : 1.1835661033011884 --> Family: # 61 FV at Mutated Child #1 at Generation # 46 : 0.9156998805275788 FV at Mutated Child #2 at Generation # 46 : 4.155027861466938 --> Family: # 62 FV at Mutated Child #1 at Generation # 46 : 4.486307163477893 FV at Mutated Child #2 at Generation # 46 : 0.7406744965059643 --> Family: # 63 FV at Mutated Child #1 at Generation # 46 : 1.0780443760649745

FV at Mutated Child #2 at Generation # 46 : 33.693312075308896 --> Family: # 64

FV at Mutated Child #1 at Generation # 46 : 5.619005947836731

FV at Mutated Child #2 at Generation # 46 : 20.576406378581495 --> Family: # 65 FV at Mutated Child #1 at Generation # 46 : 94.57870023899707 FV at Mutated Child #2 at Generation # 46 : 2.832090458998218 --> Family: # 66 FV at Mutated Child #1 at Generation # 46 : 4.742560191789133 FV at Mutated Child #2 at Generation # 46 : 7.983690768916096 --> Family: # 67 FV at Mutated Child #1 at Generation # 46 : 1.0830922081647836 FV at Mutated Child #2 at Generation # 46 : 5.122241774191376 --> Family: # 68 FV at Mutated Child #1 at Generation # 46 : 14.291509163036244 FV at Mutated Child #2 at Generation # 46 : 0.7886497161013513 --> Family: # 69 FV at Mutated Child #1 at Generation # 46 : 4.882202909234239 FV at Mutated Child #2 at Generation # 46 : 3.387027734334449 --> Family: # 70 FV at Mutated Child #1 at Generation # 46 : 0.7566407878673149 FV at Mutated Child #2 at Generation # 46 : 30.959734850160807 --> Family: # 71 FV at Mutated Child #1 at Generation # 46 : 1.605068982537185 FV at Mutated Child #2 at Generation # 46 : 28.70233481872728 --> Family: # 72 FV at Mutated Child #1 at Generation # 46 : 1.636149676177094 FV at Mutated Child #2 at Generation # 46 : 0.7434886844174678 --> Family: # 73 FV at Mutated Child #1 at Generation # 46 : 21.57257761715482 FV at Mutated Child #2 at Generation # 46 : 0.8551584295586179 --> Family: # 74 FV at Mutated Child #1 at Generation # 46 : 32.87490918602714 FV at Mutated Child #2 at Generation # 46 : 121.5844996608438 --> Family: # 75 FV at Mutated Child #1 at Generation # 46 : 23.362782790109375 FV at Mutated Child #2 at Generation # 46 : 6.247674574680708 --> Family: # 76 FV at Mutated Child #1 at Generation # 46 : 1.0531406008617608 FV at Mutated Child #2 at Generation # 46 : 37.500142030815816 --> Family: # 77 FV at Mutated Child #1 at Generation # 46 : 13.009841019912844 FV at Mutated Child #2 at Generation # 46 : 0.6193238047646119 --> Family: # 78 FV at Mutated Child #1 at Generation # 46 : 0.6193238047646119 FV at Mutated Child #2 at Generation # 46 : 136.60763263490952 --> Family: # 79 FV at Mutated Child #1 at Generation # 46 : 598.2800891836164

FV at Mutated Child #2 at Generation # 46 : 16.168766121469815

--> Family: # 80

FV at Mutated Child #1 at Generation # 46 : 0.6279821641256506 FV at Mutated Child #2 at Generation # 46 : 1.0868116886914998

--> **Generation:** # 47

--> Family: # 1

FV at Mutated Child #1 at Generation # 47 : 2.7945452364677568 FV at Mutated Child #2 at Generation # 47 : 38.346916580816355

--> Family: # 2

FV at Mutated Child #1 at Generation # 47 : 70.4413032655744 FV at Mutated Child #2 at Generation # 47 : 2.3591870538106434

--> Family: # 3

FV at Mutated Child #1 at Generation # 47 : 44.475968268289286
FV at Mutated Child #2 at Generation # 47 : 2.6391488598698998

--> Family: # 4

FV at Mutated Child #1 at Generation # 47 : 157.02818810018113 FV at Mutated Child #2 at Generation # 47 : 135.25647393668902

--> Family: # 5

FV at Mutated Child #1 at Generation # 47 : 1.281914288755534 FV at Mutated Child #2 at Generation # 47 : 3.288324630293934 --> Family: # 6

FV at Mutated Child #1 at Generation # 47 : 6.454628786669673 FV at Mutated Child #2 at Generation # 47 : 40.87156361385669 --> Family: # 7

FV at Mutated Child #1 at Generation # 47 : 12.885379334657925 FV at Mutated Child #2 at Generation # 47 : 11.077887611387983 --> Family: # 8

FV at Mutated Child #1 at Generation # 47 : 158.87540694446105 FV at Mutated Child #2 at Generation # 47 : 44.248999554336805 --> Family: # 9

FV at Mutated Child #1 at Generation # 47 : 1.9535318307454475 FV at Mutated Child #2 at Generation # 47 : 4.365161999130101 --> Family: # 10

FV at Mutated Child #1 at Generation # 47 : 8.579712565385051 FV at Mutated Child #2 at Generation # 47 : 29.798832741139815 --> Family: # 11

FV at Mutated Child #1 at Generation # 47 : 1.6723708913045106 FV at Mutated Child #2 at Generation # 47 : 8.002190935469944 --> Family: # 12

FV at Mutated Child #1 at Generation # 47 : 121.79805275974051 FV at Mutated Child #2 at Generation # 47 : 38.587748910370614 --> Family: # 13

FV at Mutated Child #1 at Generation # 47 : 102.2312344592403 FV at Mutated Child #2 at Generation # 47 : 2416.061212467838 --> Family: # 14

FV at Mutated Child #1 at Generation # 47 : 36.502340281832 FV at Mutated Child #2 at Generation # 47 : 17.61428442808301

--> Family: # 15

FV at Mutated Child #1 at Generation # 47 : 1.2889834954273356 FV at Mutated Child #2 at Generation # 47 : 528.2012801695889

--> Family: # 16

FV at Mutated Child #1 at Generation # 47 : 28.446529601851253 FV at Mutated Child #2 at Generation # 47 : 145.28877342915345

--> Family: # 17

FV at Mutated Child #1 at Generation # 47 : 12.681267974569328 FV at Mutated Child #2 at Generation # 47 : 6.007111450371633

--> Family: # 18

FV at Mutated Child #1 at Generation # 47 : 16.81870495385386 FV at Mutated Child #2 at Generation # 47 : 9.347276854027417

--> Family: # 19

FV at Mutated Child #1 at Generation # 47 : 1.3428825990436843 FV at Mutated Child #2 at Generation # 47 : 109.94205671420693

--> Family: # 20

FV at Mutated Child #1 at Generation # 47 : 33.32712056046043 FV at Mutated Child #2 at Generation # 47 : 44.410415697929224

--> Family: # 21

FV at Mutated Child #1 at Generation # 47 : 41.246542062946666 FV at Mutated Child #2 at Generation # 47 : 22.961576715073463 --> Family: # 22

FV at Mutated Child #1 at Generation # 47 : 138.98834500182426 FV at Mutated Child #2 at Generation # 47 : 10.42425671689239 --> Family: # 23

FV at Mutated Child #1 at Generation # 47 : 6.881460454526085 FV at Mutated Child #2 at Generation # 47 : 1.766579206001674 --> Family: # 24

FV at Mutated Child #1 at Generation # 47 : 109.96708783427324 FV at Mutated Child #2 at Generation # 47 : 10.362551172274411 --> Family: # 25

FV at Mutated Child #1 at Generation # 47 : 8.42764495693517 FV at Mutated Child #2 at Generation # 47 : 122.83206038436593 --> Family: # 26

FV at Mutated Child #1 at Generation # 47 : 2468.805068294769 FV at Mutated Child #2 at Generation # 47 : 0.933980793080263 --> Family: # 27

FV at Mutated Child #1 at Generation # 47 : 13.143460919241416 FV at Mutated Child #2 at Generation # 47 : 37.0004046808987

--> Family: # 28

FV at Mutated Child #1 at Generation # 47 : 1.993950711165318

FV at Mutated Child #2 at Generation # 47 : 155.83640855766882 --> Family: # 29

FV at Mutated Child #1 at Generation # 47 : 1.6157457770259276
FV at Mutated Child #2 at Generation # 47 : 12.817736273116383
--> Family: # 30

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FV at Mutated Child #1 at Generation # 47 : 6.913786311632815
FV at Mutated Child #2 at Generation # 47 : 140.456586052365
--> Family: # 31
FV at Mutated Child #1 at Generation # 47 : 546.3961297485478
FV at Mutated Child #2 at Generation # 47 : 2.732800660889201
--> Family: # 32
FV at Mutated Child #1 at Generation # 47 : 30.00848389856325
FV at Mutated Child #2 at Generation # 47 : 644.4796263538051
--> Family: # 33
FV at Mutated Child #1 at Generation # 47 : 157.77538972110875
FV at Mutated Child #2 at Generation # 47 : 3.240206576170289
--> Family: # 34
FV at Mutated Child #1 at Generation # 47 : 40.37279365814377
FV at Mutated Child #2 at Generation # 47 : 1.9535318307454475
--> Family: # 35
FV at Mutated Child #1 at Generation # 47 : 8.500513215954138
FV at Mutated Child #2 at Generation # 47 : 12.817736273116383
--> Family: # 36
FV at Mutated Child #1 at Generation # 47 : 132.27828876510912
FV at Mutated Child #2 at Generation # 47 : 8.890121045042864
--> Family: # 37
FV at Mutated Child #1 at Generation # 47 : 12.868475152975435
FV at Mutated Child #2 at Generation # 47 : 0.9460912437960596
--> Family: # 38
FV at Mutated Child #1 at Generation # 47 : 12.851425944306733
FV at Mutated Child #2 at Generation # 47 : 4.437909610578879
--> Family: # 39
FV at Mutated Child #1 at Generation # 47 : 8.400952720689354
FV at Mutated Child #2 at Generation # 47 : 1.2823912759271479
--> Family: # 40
FV at Mutated Child #1 at Generation # 47 : 3.2174811669671235
FV at Mutated Child #2 at Generation # 47 : 3.3743761478008456
--> Family: # 41
FV at Mutated Child #1 at Generation # 47 : 140.87046601292593
FV at Mutated Child #2 at Generation # 47 : 2.2751607380699976
--> Family: # 42
FV at Mutated Child #1 at Generation # 47 : 2.472006296182687
FV at Mutated Child #2 at Generation # 47 : 0.8367365061370045
--> Family: # 43
FV at Mutated Child #1 at Generation # 47 : 6.635788542455778
FV at Mutated Child #2 at Generation # 47 : 0.8806472355619042
--> Family: # 44
FV at Mutated Child #1 at Generation # 47 : 2.9524948044235817
FV at Mutated Child #2 at Generation # 47 : 4.419463654203659
--> Family: # 45
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FV at Mutated Child #1 at Generation # 47 : 111.34129636204584 FV at Mutated Child #2 at Generation # 47 : 53.56956000713204 --> Family: # 46 FV at Mutated Child #1 at Generation # 47 : 3.2486553899745583 FV at Mutated Child #2 at Generation # 47 : 8.707319579190205 --> Family: # 47 FV at Mutated Child #1 at Generation # 47 : 34.79522745786368 FV at Mutated Child #2 at Generation # 47 : 17.840480537328652 --> Family: # 48 FV at Mutated Child #1 at Generation # 47 : 128.65689430847095 FV at Mutated Child #2 at Generation # 47 : 9.500047052819372 --> Family: # 49 FV at Mutated Child #1 at Generation # 47 : 18.407509797762053 FV at Mutated Child #2 at Generation # 47 : 12.732632704699142 --> Family: # 50 FV at Mutated Child #1 at Generation # 47 : 31.09383510500513 FV at Mutated Child #2 at Generation # 47 : 155.78222546103558 --> Family: # 51 FV at Mutated Child #1 at Generation # 47 : 2.171203154545978 FV at Mutated Child #2 at Generation # 47 : 143.76993381761181 --> Family: # 52 FV at Mutated Child #1 at Generation # 47 : 3.362950010046204 FV at Mutated Child #2 at Generation # 47 : 15.509457964134423 --> Family: # 53 FV at Mutated Child #1 at Generation # 47 : 155.41416932232872 FV at Mutated Child #2 at Generation # 47 : 3.7786853547420356 --> Family: # 54 FV at Mutated Child #1 at Generation # 47 : 3.1988565714522306 FV at Mutated Child #2 at Generation # 47 : 6.852704054504759 --> Family: # 55 FV at Mutated Child #1 at Generation # 47 : 14.2123376744637 FV at Mutated Child #2 at Generation # 47 : 10.732378288715182 --> Family: # 56 FV at Mutated Child #1 at Generation # 47 : 3.7555370556673413 FV at Mutated Child #2 at Generation # 47 : 30.434047240731868 --> Family: # 57 FV at Mutated Child #1 at Generation # 47 : 1.1862623582108611 FV at Mutated Child #2 at Generation # 47 : 9.435862547984403 --> Family: # 58 FV at Mutated Child #1 at Generation # 47 : 3.4392555075836326 FV at Mutated Child #2 at Generation # 47 : 10.701924693221756 --> Family: # 59 FV at Mutated Child #1 at Generation # 47 : 606.1933852877119

FV at Mutated Child #2 at Generation # 47 : 0.7566407878673149 --> Family: # 60

FV at Mutated Child #1 at Generation # 47 : 3.279282645124542

FV at Mutated Child #2 at Generation # 47 : 39.153319000442124 --> Family: # 61 FV at Mutated Child #1 at Generation # 47 : 1.251856370774959 FV at Mutated Child #2 at Generation # 47 : 2.939299426153766 --> Family: # 62 FV at Mutated Child #1 at Generation # 47 : 1.446070865895578 FV at Mutated Child #2 at Generation # 47 : 546.9666963861184 --> Family: # 63 FV at Mutated Child #1 at Generation # 47 : 0.83415819749336 FV at Mutated Child #2 at Generation # 47 : 11.915990535497496 --> Family: # 64 FV at Mutated Child #1 at Generation # 47 : 116.96999861648814 FV at Mutated Child #2 at Generation # 47 : 0.7088162510247016 --> Family: # 65 FV at Mutated Child #1 at Generation # 47 : 7.230813554622402 FV at Mutated Child #2 at Generation # 47 : 1.0354967602794969 --> Family: # 66 FV at Mutated Child #1 at Generation # 47 : 3.8143982772368275 FV at Mutated Child #2 at Generation # 47 : 8.77685122559575 --> Family: # 67 FV at Mutated Child #1 at Generation # 47 : 122.44943414378751 FV at Mutated Child #2 at Generation # 47 : 2.1172141720797892 --> Family: # 68 FV at Mutated Child #1 at Generation # 47 : 5.107009697936165 FV at Mutated Child #2 at Generation # 47 : 1.3019389628548108 --> Family: # 69 FV at Mutated Child #1 at Generation # 47 : 40.46444090715349 FV at Mutated Child #2 at Generation # 47 : 10.57772131081023 --> Family: # 70 FV at Mutated Child #1 at Generation # 47 : 6.904581948160711 FV at Mutated Child #2 at Generation # 47 : 2.570529331097039 --> Family: # 71 FV at Mutated Child #1 at Generation # 47 : 39.392995136617934 FV at Mutated Child #2 at Generation # 47 : 2.1458289133717 --> Family: # 72 FV at Mutated Child #1 at Generation # 47 : 4.39033272887702 FV at Mutated Child #2 at Generation # 47 : 586.1302210479794 --> Family: # 73 FV at Mutated Child #1 at Generation # 47 : 2500.8332710656096 FV at Mutated Child #2 at Generation # 47 : 6.117764511336575 --> Family: # 74 FV at Mutated Child #1 at Generation # 47 : 8.130987436454136 FV at Mutated Child #2 at Generation # 47 : 1.7163256289616537 --> Family: # 75 FV at Mutated Child #1 at Generation # 47 : 165.88979098812933 FV at Mutated Child #2 at Generation # 47 : 3.4700009193357766

--> Family: # 76

FV at Mutated Child #1 at Generation # 47 : 42.04594757894542 FV at Mutated Child #2 at Generation # 47 : 16.34787334987291

--> Family: # 77

FV at Mutated Child #1 at Generation # 47 : 3.0489350829146287 FV at Mutated Child #2 at Generation # 47 : 418.1308998244681

--> Family: # 78

FV at Mutated Child #1 at Generation # 47 : 4.365161999130101 FV at Mutated Child #2 at Generation # 47 : 4.295143338939125

--> Family: # 79

FV at Mutated Child #1 at Generation # 47 : 2.9184280835094856 FV at Mutated Child #2 at Generation # 47 : 1.6870101357431828

--> Family: # 80

FV at Mutated Child #1 at Generation # 47 : 579.496639704044 FV at Mutated Child #2 at Generation # 47 : 1.3638015611332803

--> Generation: # 48

--> Family: # 1

FV at Mutated Child #1 at Generation # 48 : 34.23680627812101 FV at Mutated Child #2 at Generation # 48 : 0.6294141771050719 --> Family: # 2

FV at Mutated Child #1 at Generation # 48 : 1.8888214698295962 FV at Mutated Child #2 at Generation # 48 : 29.780725074020015 --> Family: # 3

FV at Mutated Child #1 at Generation # 48 : 0.6480333142153553 FV at Mutated Child #2 at Generation # 48 : 1.704424076200426 --> Family: # 4

FV at Mutated Child #1 at Generation # 48 : 1.1487770461364264 FV at Mutated Child #2 at Generation # 48 : 118.76640038675248 --> Family: # 5

FV at Mutated Child #1 at Generation # 48 : 2342.2627135550374 FV at Mutated Child #2 at Generation # 48 : 0.6253815667888474 --> Family: # 6

FV at Mutated Child #1 at Generation # 48 : 2434.7049929833256 FV at Mutated Child #2 at Generation # 48 : 2244.4265649999234 --> Family: # 7

FV at Mutated Child #1 at Generation # 48 : 4.609323222216235 FV at Mutated Child #2 at Generation # 48 : 29.780725074020015 --> Family: # 8

FV at Mutated Child #1 at Generation # 48 : 0.7058524504101736 FV at Mutated Child #2 at Generation # 48 : 1.2259337248921116 --> Family: # 9

FV at Mutated Child #1 at Generation # 48 : 27.70919758146214 FV at Mutated Child #2 at Generation # 48 : 0.6270091578297339 --> Family: # 10

FV at Mutated Child #1 at Generation # 48 : 0.9736046231684853 FV at Mutated Child #2 at Generation # 48 : 0.7464777884230932

--> Family: # 11

FV at Mutated Child #1 at Generation # 48 : 2454.559196391981 FV at Mutated Child #2 at Generation # 48 : 144.89977775105007 --> Family: # 12

FV at Mutated Child #1 at Generation # 48 : 24.50530301496384 FV at Mutated Child #2 at Generation # 48 : 26.616533784556214 --> Family: # 13

FV at Mutated Child #1 at Generation # 48 : 13.844338141937047 FV at Mutated Child #2 at Generation # 48 : 8.114164022885578 --> Family: # 14

FV at Mutated Child #1 at Generation # 48 : 0.7202440200446862 FV at Mutated Child #2 at Generation # 48 : 12.042628835583335 --> Family: # 15

FV at Mutated Child #1 at Generation # 48 : 0.7071759433771825 FV at Mutated Child #2 at Generation # 48 : 4.2333693590270665 --> Family: # 16

FV at Mutated Child #1 at Generation # 48 : 118.93143803098806 FV at Mutated Child #2 at Generation # 48 : 5.822604881241663 --> Family: # 17

FV at Mutated Child #1 at Generation # 48 : 7.361363239283842 FV at Mutated Child #2 at Generation # 48 : 4.3183067553519 --> Family: # 18

FV at Mutated Child #1 at Generation # 48 : 5.128189965433757 FV at Mutated Child #2 at Generation # 48 : 4.421279525842767

--> Family: # 19

FV at Mutated Child #1 at Generation # 48 : 1.1090986754751264 FV at Mutated Child #2 at Generation # 48 : 6.278965054606485 --> Family: # 20

FV at Mutated Child #1 at Generation # 48 : 8.771508386598065 FV at Mutated Child #2 at Generation # 48 : 592.3766970177198 --> Family: # 21

FV at Mutated Child #1 at Generation # 48 : 0.7886497161013513 FV at Mutated Child #2 at Generation # 48 : 36.058398249470926 --> Family: # 22

FV at Mutated Child #1 at Generation # 48 : 2.8041745369199362 FV at Mutated Child #2 at Generation # 48 : 0.6856229073835887 --> Family: # 23

FV at Mutated Child #1 at Generation # 48 : 5.106460488318924 FV at Mutated Child #2 at Generation # 48 : 1.4767323447625604 --> Family: # 24

FV at Mutated Child #1 at Generation # 48 : 87.79169573018365 FV at Mutated Child #2 at Generation # 48 : 2379.6377972009154 --> Family: # 25

FV at Mutated Child #1 at Generation # 48 : 585.7292478690019 FV at Mutated Child #2 at Generation # 48 : 0.7016879581528672 --> Family: # 26

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FV at Mutated Child #1 at Generation # 48 : 1.2360199698932797
FV at Mutated Child #2 at Generation # 48 : 603.5493303690761
--> Family: # 27
FV at Mutated Child #1 at Generation # 48 : 3.0428988338849208
FV at Mutated Child #2 at Generation # 48 : 1.0269515337371837
--> Family: # 28
FV at Mutated Child #1 at Generation # 48 : 1.3144097396832306
FV at Mutated Child #2 at Generation # 48 : 2.3337723249640416
--> Family: # 29
FV at Mutated Child #1 at Generation # 48 : 573.3207124245221
FV at Mutated Child #2 at Generation # 48 : 38.456237797220595
--> Family: # 30
FV at Mutated Child #1 at Generation # 48 : 5.265536987379641
FV at Mutated Child #2 at Generation # 48 : 556.73026581117
--> Family: # 31
FV at Mutated Child #1 at Generation # 48 : 1.1090986754751264
FV at Mutated Child #2 at Generation # 48 : 7.797487362004464
--> Family: # 32
FV at Mutated Child #1 at Generation # 48 : 5.325898283875447
FV at Mutated Child #2 at Generation # 48 : 0.937982729486995
--> Family: # 33
FV at Mutated Child #1 at Generation # 48 : 1.4801402877379966
FV at Mutated Child #2 at Generation # 48 : 2340.675475944714
--> Family: # 34
FV at Mutated Child #1 at Generation # 48 : 1.117014011365948
FV at Mutated Child #2 at Generation # 48 : 2389.144232077631
--> Family: # 35
FV at Mutated Child #1 at Generation # 48 : 6.0336618942233375
FV at Mutated Child #2 at Generation # 48 : 118.23619209311482
--> Family: # 36
FV at Mutated Child #1 at Generation # 48 : 0.7058524504101736
FV at Mutated Child #2 at Generation # 48 : 1.8738203741440254
--> Family: # 37
FV at Mutated Child #1 at Generation # 48 : 2.8071189265017162
FV at Mutated Child #2 at Generation # 48 : 1.0434483769197183
--> Family: # 38
FV at Mutated Child #1 at Generation # 48 : 5.849485923194615
FV at Mutated Child #2 at Generation # 48 : 119.90742872317232
--> Family: # 39
FV at Mutated Child #1 at Generation # 48 : 10.703400797925596
FV at Mutated Child #2 at Generation # 48 : 3.0428988338849208
--> Family: # 40
FV at Mutated Child #1 at Generation # 48 : 0.7148989458387494
FV at Mutated Child #2 at Generation # 48 : 30.177632214782736
--> Family: # 41
```

FV at Mutated Child #1 at Generation # 48 : 0.8953592070731633 FV at Mutated Child #2 at Generation # 48 : 116.22949285579917 --> Family: # 42 FV at Mutated Child #1 at Generation # 48 : 10.247883989282338 FV at Mutated Child #2 at Generation # 48: 0.7069109161128969 --> Family: # 43 FV at Mutated Child #1 at Generation # 48 : 12.612184527559188 FV at Mutated Child #2 at Generation # 48 : 2442.7227764290487 --> Family: # 44 FV at Mutated Child #1 at Generation # 48 : 3.873098095754216 FV at Mutated Child #2 at Generation # 48 : 0.6254638334230455 --> Family: # 45 FV at Mutated Child #1 at Generation # 48 : 3.7128675670297646 FV at Mutated Child #2 at Generation # 48 : 9.796032481854688 --> Family: # 46 FV at Mutated Child #1 at Generation # 48 : 4.254692974684422 FV at Mutated Child #2 at Generation # 48 : 4.225153266673024 --> Family: # 47 FV at Mutated Child #1 at Generation # 48 : 4.919679834061522 FV at Mutated Child #2 at Generation # 48 : 1.053167063808268 --> Family: # 48 FV at Mutated Child #1 at Generation # 48 : 6.353402338516805 FV at Mutated Child #2 at Generation # 48 : 10.703400797925596 --> Family: # 49 FV at Mutated Child #1 at Generation # 48 : 3.0056623276640217 FV at Mutated Child #2 at Generation # 48 : 2.8041745369199362 --> Family: # 50 FV at Mutated Child #1 at Generation # 48 : 30.218897439546467 FV at Mutated Child #2 at Generation # 48 : 1.74267374934148 --> Family: # 51 FV at Mutated Child #1 at Generation # 48 : 5.2584011636326675 FV at Mutated Child #2 at Generation # 48 : 3.90850608019545 --> Family: # 52 FV at Mutated Child #1 at Generation # 48 : 19.17932036238726 FV at Mutated Child #2 at Generation # 48 : 533.7502433423753 --> Family: # 53 FV at Mutated Child #1 at Generation # 48 : 3.3363897652222505 FV at Mutated Child #2 at Generation # 48 : 0.8954707331841179 --> Family: # 54 FV at Mutated Child #1 at Generation # 48 : 0.9056555491487503 FV at Mutated Child #2 at Generation # 48 : 22.35539191179114 --> Family: # 55 FV at Mutated Child #1 at Generation # 48 : 1.908710329143707

FV at Mutated Child #2 at Generation # 48 : 24.43519810822744 --> Family: # 56

FV at Mutated Child #1 at Generation # 48 : 2.8994957782251563

FV at Mutated Child #2 at Generation # 48 : 0.9083162832569732 --> Family: # 57 FV at Mutated Child #1 at Generation # 48 : 1.0218121397237856 FV at Mutated Child #2 at Generation # 48 : 0.6294452218981413 --> Family: # 58 FV at Mutated Child #1 at Generation # 48 : 17.813706739191936 FV at Mutated Child #2 at Generation # 48 : 1.3164090281065408 --> Family: # 59 FV at Mutated Child #1 at Generation # 48 : 0.6453577472305926 FV at Mutated Child #2 at Generation # 48 : 5.228920057422462 --> Family: # 60 FV at Mutated Child #1 at Generation # 48 : 0.6408220196314772 FV at Mutated Child #2 at Generation # 48 : 0.8357144227715375 --> Family: # 61 FV at Mutated Child #1 at Generation # 48 : 1.6870101357431828 FV at Mutated Child #2 at Generation # 48 : 1.7503230308550357 --> Family: # 62 FV at Mutated Child #1 at Generation # 48 : 0.6895079167839544 FV at Mutated Child #2 at Generation # 48 : 0.8431733026671793 --> Family: # 63 FV at Mutated Child #1 at Generation # 48 : 528.5655965409 FV at Mutated Child #2 at Generation # 48 : 0.6339610603150392 --> Family: # 64 FV at Mutated Child #1 at Generation # 48 : 14.24991856872232 FV at Mutated Child #2 at Generation # 48 : 24.095923602478003 --> Family: # 65 FV at Mutated Child #1 at Generation # 48 : 0.7296721256511843 FV at Mutated Child #2 at Generation # 48 : 31.928565141753044 --> Family: # 66 FV at Mutated Child #1 at Generation # 48 : 23.086917925979495 FV at Mutated Child #2 at Generation # 48 : 29.370995293013515 --> Family: # 67 FV at Mutated Child #1 at Generation # 48 : 5.265536987379641 FV at Mutated Child #2 at Generation # 48 : 129.42361271772322 --> Family: # 68 FV at Mutated Child #1 at Generation # 48 : 5.421860923853406 FV at Mutated Child #2 at Generation # 48 : 23.364162251994614 --> Family: # 69 FV at Mutated Child #1 at Generation # 48 : 1.1722993220024551 FV at Mutated Child #2 at Generation # 48 : 22.841963853416484 --> Family: # 70 FV at Mutated Child #1 at Generation # 48 : 144.15227095763174 FV at Mutated Child #2 at Generation # 48 : 1.2090199740289405 --> Family: # 71 FV at Mutated Child #1 at Generation # 48 : 31.079403392966636

FV at Mutated Child #2 at Generation # 48 : 10.138661864857259

--> Family: # 72

FV at Mutated Child #1 at Generation # 48 : 1.0554265109605794 FV at Mutated Child #2 at Generation # 48 : 14.544151779334245

--> Family: # 73

FV at Mutated Child #1 at Generation # 48 : 127.29252254085758 FV at Mutated Child #2 at Generation # 48 : 12.255467684391627

--> Family: # 74

FV at Mutated Child #1 at Generation # 48 : 1.2001345573857916 FV at Mutated Child #2 at Generation # 48 : 30.57722221951656

--> Family: # 75

FV at Mutated Child #1 at Generation # 48 : 0.6259503365710037 FV at Mutated Child #2 at Generation # 48 : 0.7629028651632288

--> Family: # 76

FV at Mutated Child #1 at Generation # 48 : 1.1090986754751264 FV at Mutated Child #2 at Generation # 48 : 509.94132396298244 --> Family: # 77

FV at Mutated Child #1 at Generation # 48 : 26.646873737626102 FV at Mutated Child #2 at Generation # 48 : 138.07489257595097 --> Family: # 78

FV at Mutated Child #1 at Generation # 48 : 0.9884811024839609 FV at Mutated Child #2 at Generation # 48 : 26.097799409085578 --> Family: # 79

FV at Mutated Child #1 at Generation # 48 : 136.3626445283526 FV at Mutated Child #2 at Generation # 48 : 0.6241086986071667 --> Family: # 80

FV at Mutated Child #1 at Generation # 48 : 6.508442030724854 FV at Mutated Child #2 at Generation # 48 : 9.781594354935416

--> Generation: # 49

--> Family: # 1

FV at Mutated Child #1 at Generation # 49 : 156.97052303182485 FV at Mutated Child #2 at Generation # 49 : 579.496639704044 --> Family: # 2

FV at Mutated Child #1 at Generation # 49 : 38.09724205591513 FV at Mutated Child #2 at Generation # 49 : 129.2589145142676 --> Family: # 3

FV at Mutated Child #1 at Generation # 49 : 154.82949773108427 FV at Mutated Child #2 at Generation # 49 : 33.509226598729285 --> Family: # 4

FV at Mutated Child #1 at Generation # 49 : 2.201788564431466 FV at Mutated Child #2 at Generation # 49 : 0.7103350710499404 --> Family: # 5

FV at Mutated Child #1 at Generation # 49 : 3.5013952541635494 FV at Mutated Child #2 at Generation # 49 : 3.1670652206221814 --> Family: # 6

FV at Mutated Child #1 at Generation # 49 : 40.31047716348063 FV at Mutated Child #2 at Generation # 49 : 4.4413132412649405

--> Family: # 7

FV at Mutated Child #1 at Generation # 49 : 627.2486569859788 FV at Mutated Child #2 at Generation # 49 : 32.2196152141248

--> Family: # 8

FV at Mutated Child #1 at Generation # 49 : 156.4737845525252 FV at Mutated Child #2 at Generation # 49 : 8.550311933969708

--> Family: # 9

FV at Mutated Child #1 at Generation # 49 : 4.533957661972896 FV at Mutated Child #2 at Generation # 49 : 10.318140290684589

--> Family: # 10

FV at Mutated Child #1 at Generation # 49 : 125.95723731790983 FV at Mutated Child #2 at Generation # 49 : 139.89885647461384

--> Family: # 11

FV at Mutated Child #1 at Generation # 49 : 617.7032953613971 FV at Mutated Child #2 at Generation # 49 : 644.4796263538051 --> Family: # 12

FV at Mutated Child #1 at Generation # 49 : 3.2826577022826426 FV at Mutated Child #2 at Generation # 49 : 130.60303679262398 --> Family: # 13

FV at Mutated Child #1 at Generation # 49 : 7.719676286147125 FV at Mutated Child #2 at Generation # 49 : 591.2649221911778 --> Family: # 14

FV at Mutated Child #1 at Generation # 49 : 539.6729025546759
FV at Mutated Child #2 at Generation # 49 : 1.3428825990436843

--> Family: # 15

FV at Mutated Child #1 at Generation # 49 : 3.180989916896567 FV at Mutated Child #2 at Generation # 49 : 2444.1467573359364 --> Family: # 16

FV at Mutated Child #1 at Generation # 49 : 156.63171565403286 FV at Mutated Child #2 at Generation # 49 : 9.783537634024942 --> Family: # 17

FV at Mutated Child #1 at Generation # 49 : 3.0489350829146287 FV at Mutated Child #2 at Generation # 49 : 10.091446801123668 --> Family: # 18

FV at Mutated Child #1 at Generation # 49 : 12.817736273116383
FV at Mutated Child #2 at Generation # 49 : 585.193702835361
--> Family: # 19

FV at Mutated Child #1 at Generation # 49 : 112.92089323330029 FV at Mutated Child #2 at Generation # 49 : 144.18240656764786 --> Family: # 20

FV at Mutated Child #1 at Generation # 49 : 1.2627443623511958 FV at Mutated Child #2 at Generation # 49 : 15.509457964134423 --> Family: # 21

FV at Mutated Child #1 at Generation # 49 : 20.90138551957828 FV at Mutated Child #2 at Generation # 49 : 551.6298996276619 --> Family: # 22

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FV at Mutated Child #1 at Generation # 49 : 1.8978427237707707
FV at Mutated Child #2 at Generation # 49 : 3.0633050105217934
--> Family: # 23
FV at Mutated Child #1 at Generation # 49 : 2416.9192764869244
FV at Mutated Child #2 at Generation # 49 : 10.759758557637547
--> Family: # 24
FV at Mutated Child #1 at Generation # 49 : 1.9224765317554149
FV at Mutated Child #2 at Generation # 49 : 7.772575545284487
--> Family: # 25
FV at Mutated Child #1 at Generation # 49 : 1.1862623582108611
FV at Mutated Child #2 at Generation # 49 : 5.966592526139418
--> Family: # 26
FV at Mutated Child #1 at Generation # 49 : 1.9437393339323794
FV at Mutated Child #2 at Generation # 49 : 3.2901893438781387
--> Family: # 27
FV at Mutated Child #1 at Generation # 49 : 1.7229976517106274
FV at Mutated Child #2 at Generation # 49 : 3.234310762263366
--> Family: # 28
FV at Mutated Child #1 at Generation # 49 : 7.34970879943917
FV at Mutated Child #2 at Generation # 49 : 4.343053943171973
--> Family: # 29
FV at Mutated Child #1 at Generation # 49 : 40.074931505486724
FV at Mutated Child #2 at Generation # 49 : 6.200473561883219
--> Family: # 30
FV at Mutated Child #1 at Generation # 49 : 1.151877690179122
FV at Mutated Child #2 at Generation # 49 : 2.211533645857861
--> Family: # 31
FV at Mutated Child #1 at Generation # 49 : 3.803710743356345
FV at Mutated Child #2 at Generation # 49 : 1.2627443623511958
--> Family: # 32
FV at Mutated Child #1 at Generation # 49 : 1.3309799948550616
FV at Mutated Child #2 at Generation # 49 : 158.3168655842051
--> Family: # 33
FV at Mutated Child #1 at Generation # 49 : 39.45452442533933
FV at Mutated Child #2 at Generation # 49 : 34.17026960207683
--> Family: # 34
FV at Mutated Child #1 at Generation # 49 : 0.82335146245304
FV at Mutated Child #2 at Generation # 49 : 3.2826577022826426
--> Family: # 35
FV at Mutated Child #1 at Generation # 49 : 157.34333063207944
FV at Mutated Child #2 at Generation # 49 : 151.00840721715247
--> Family: # 36
FV at Mutated Child #1 at Generation # 49 : 33.19043271383371
FV at Mutated Child #2 at Generation # 49 : 10.1184348655589
--> Family: # 37
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FV at Mutated Child #1 at Generation # 49 : 3.7407813136482555 FV at Mutated Child #2 at Generation # 49 : 0.8336577569165868 --> Family: # 38 FV at Mutated Child #1 at Generation # 49 : 1.6870101357431828 FV at Mutated Child #2 at Generation # 49 : 524.4913936921805 --> Family: # 39 FV at Mutated Child #1 at Generation # 49 : 9.038958872898032 FV at Mutated Child #2 at Generation # 49 : 38.346916580816355 --> Family: # 40 FV at Mutated Child #1 at Generation # 49 : 2502.955025332502 FV at Mutated Child #2 at Generation # 49 : 7.34970879943917 --> Family: # 41 FV at Mutated Child #1 at Generation # 49 : 8.511004276790654 FV at Mutated Child #2 at Generation # 49 : 84.7407406597177 --> Family: # 42 FV at Mutated Child #1 at Generation # 49 : 2422.469671728101 FV at Mutated Child #2 at Generation # 49 : 119.55689377811805 --> Family: # 43 FV at Mutated Child #1 at Generation # 49 : 13.645584504857574 FV at Mutated Child #2 at Generation # 49 : 40.68126817038614 --> Family: # 44 FV at Mutated Child #1 at Generation # 49 : 624.8061680772258 FV at Mutated Child #2 at Generation # 49 : 7.73498239000465 --> Family: # 45 FV at Mutated Child #1 at Generation # 49 : 7.3885720581924605 FV at Mutated Child #2 at Generation # 49 : 1.6870101357431828 --> Family: # 46 FV at Mutated Child #1 at Generation # 49 : 6.095242526193299 FV at Mutated Child #2 at Generation # 49 : 629.5011660116712 --> Family: # 47 FV at Mutated Child #1 at Generation # 49 : 20.866172316467235 FV at Mutated Child #2 at Generation # 49 : 1.3781674692927446 --> Family: # 48 FV at Mutated Child #1 at Generation # 49 : 3.4202164852535577 FV at Mutated Child #2 at Generation # 49 : 628.4716900163359 --> Family: # 49 FV at Mutated Child #1 at Generation # 49 : 529.2000913468283 FV at Mutated Child #2 at Generation # 49 : 3.4905324356401666 --> Family: # 50 FV at Mutated Child #1 at Generation # 49 : 0.9341814118156022 FV at Mutated Child #2 at Generation # 49 : 1.3160229699532275 --> Family: # 51 FV at Mutated Child #1 at Generation # 49 : 31.43193908536634 FV at Mutated Child #2 at Generation # 49 : 19.135566362410806

--> Family: # 52 FV at Mutated Child #1 at Generation # 49 : 10.592135003939127

FV at Mutated Child #2 at Generation # 49 : 41.61384601103592 --> Family: # 53 FV at Mutated Child #1 at Generation # 49 : 5.835165703310654 FV at Mutated Child #2 at Generation # 49 : 1.1459947925710972 --> Family: # 54 FV at Mutated Child #1 at Generation # 49 : 3.907858866189956 FV at Mutated Child #2 at Generation # 49 : 115.74661641277184 --> Family: # 55 FV at Mutated Child #1 at Generation # 49 : 461.3135101496151 FV at Mutated Child #2 at Generation # 49 : 12.14491364477415 --> Family: # 56 FV at Mutated Child #1 at Generation # 49 : 144.18240656764786 FV at Mutated Child #2 at Generation # 49 : 32.00056238492819 --> Family: # 57 FV at Mutated Child #1 at Generation # 49 : 158.26168213151806 FV at Mutated Child #2 at Generation # 49 : 4.419463654203659 --> Family: # 58 FV at Mutated Child #1 at Generation # 49 : 11.98011490879929 FV at Mutated Child #2 at Generation # 49 : 138.3264714238919 --> Family: # 59 FV at Mutated Child #1 at Generation # 49 : 1.6870101357431828 FV at Mutated Child #2 at Generation # 49 : 10.500839965852892 --> Family: # 60 FV at Mutated Child #1 at Generation # 49 : 31.296551260514057 FV at Mutated Child #2 at Generation # 49 : 1.6524463710549506 --> Family: # 61 FV at Mutated Child #1 at Generation # 49 : 22.973533563294747 FV at Mutated Child #2 at Generation # 49 : 1.3996717827130145 --> Family: # 62 FV at Mutated Child #1 at Generation # 49 : 139.6108434994112 FV at Mutated Child #2 at Generation # 49 : 7.316015179928913 --> Family: # 63 FV at Mutated Child #1 at Generation # 49 : 614.6744312286415 FV at Mutated Child #2 at Generation # 49 : 20.464665240123388 --> Family: # 64 FV at Mutated Child #1 at Generation # 49 : 1.3996717827130145 FV at Mutated Child #2 at Generation # 49 : 64.64742798749353 --> Family: # 65 FV at Mutated Child #1 at Generation # 49 : 1.1689479187478713 FV at Mutated Child #2 at Generation # 49 : 1.9535318307454475 --> Family: # 66 FV at Mutated Child #1 at Generation # 49 : 6.5025092580012 FV at Mutated Child #2 at Generation # 49 : 11.63589531285509 --> Family: # 67 FV at Mutated Child #1 at Generation # 49 : 141.08977523825195 FV at Mutated Child #2 at Generation # 49 : 1.495255691509383

localhost:8888/nbconvert/html/Desktop/Matheuristics/Ex 1 2 3.ipynb?download=false

--> Family: # 68

FV at Mutated Child #1 at Generation # 49 : 141.49009482991988 FV at Mutated Child #2 at Generation # 49 : 0.9052586236675928 --> Family: # 69

FV at Mutated Child #1 at Generation # 49 : 154.92924012826873 FV at Mutated Child #2 at Generation # 49 : 105.4561199104873

--> Family: # 70

FV at Mutated Child #1 at Generation # 49 : 159.815350742231 FV at Mutated Child #2 at Generation # 49 : 10.155285923934244

--> Family: # 71

FV at Mutated Child #1 at Generation # 49 : 35.92174416693973 FV at Mutated Child #2 at Generation # 49 : 3.32265480816602

--> Family: # 72

FV at Mutated Child #1 at Generation # 49 : 1.9437393339323794
FV at Mutated Child #2 at Generation # 49 : 2.827749712179073
--> Family: # 73

FV at Mutated Child #1 at Generation # 49 : 1.0344612215707125 FV at Mutated Child #2 at Generation # 49 : 1.6020599675239744 --> Family: # 74

FV at Mutated Child #1 at Generation # 49 : 3.6205089643708632 FV at Mutated Child #2 at Generation # 49 : 8.296389716689122 --> Family: # 75

FV at Mutated Child #1 at Generation # 49 : 145.67171429579187 FV at Mutated Child #2 at Generation # 49 : 11.946485761468228

--> Family: # 76

FV at Mutated Child #1 at Generation # 49 : 148.6042493466776 FV at Mutated Child #2 at Generation # 49 : 140.7166297478932 --> Family: # 77

FV at Mutated Child #1 at Generation # 49 : 39.02860228378817 FV at Mutated Child #2 at Generation # 49 : 40.133644067587156

--> Family: # 78

FV at Mutated Child #1 at Generation # 49 : 638.2988800827285 FV at Mutated Child #2 at Generation # 49 : 31.228599988925165 --> Family: # 79

FV at Mutated Child #1 at Generation # 49 : 44.41889487297916 FV at Mutated Child #2 at Generation # 49 : 592.0781283208102 --> Family: # 80

FV at Mutated Child #1 at Generation # 49 : 39.4939498346443

FV at Mutated Child #2 at Generation # 49 : 17.742240862409982 --> Generation: # 50

--> Family: # 1

FV at Mutated Child #1 at Generation # 50 : 29.321282939849922 FV at Mutated Child #2 at Generation # 50 : 87.07625801988249 --> Family: # 2

FV at Mutated Child #1 at Generation # 50 : 11.533223910874165 FV at Mutated Child #2 at Generation # 50 : 1.4767323447625604

Ex_1_2_3 --> Family: # 3 FV at Mutated Child #1 at Generation # 50 : 5.187587791670424 FV at Mutated Child #2 at Generation # 50 : 29.64901888575927 --> Family: # 4 FV at Mutated Child #1 at Generation # 50 : 0.7886502319126429 FV at Mutated Child #2 at Generation # 50 : 31.836600138668377 --> Family: # 5 FV at Mutated Child #1 at Generation # 50 : 3.011024649008669 FV at Mutated Child #2 at Generation # 50 : 1.3973473911191543 --> Family: # 6 FV at Mutated Child #1 at Generation # 50 : 5.284796540821054 FV at Mutated Child #2 at Generation # 50 : 136.72916809626304 --> Family: # 7 FV at Mutated Child #1 at Generation # 50 : 15.246056928553049 FV at Mutated Child #2 at Generation # 50 : 1.146868724722095 --> Family: # 8 FV at Mutated Child #1 at Generation # 50 : 1.6907201942229748 FV at Mutated Child #2 at Generation # 50 : 537.4904729362052 --> Family: # 9 FV at Mutated Child #1 at Generation # 50 : 28.73542225584418 FV at Mutated Child #2 at Generation # 50 : 0.7603295979211905 --> Family: # 10 FV at Mutated Child #1 at Generation # 50 : 9.00702410137361 FV at Mutated Child #2 at Generation # 50 : 0.6852456542746924 --> Family: # 11 FV at Mutated Child #1 at Generation # 50 : 2323.3119649673204 FV at Mutated Child #2 at Generation # 50 : 1830.621597289312 --> Family: # 12 FV at Mutated Child #1 at Generation # 50 : 37.69002454864336 FV at Mutated Child #2 at Generation # 50 : 0.6193238047646119 --> Family: # 13 FV at Mutated Child #1 at Generation # 50 : 2.2241852570261855 FV at Mutated Child #2 at Generation # 50 : 124.13406444242021 --> Family: # 14 FV at Mutated Child #1 at Generation # 50 : 0.6276085691470515 FV at Mutated Child #2 at Generation # 50 : 1.559339247203312 --> Family: # 15 FV at Mutated Child #1 at Generation # 50 : 0.7400205804034503 FV at Mutated Child #2 at Generation # 50 : 0.7505628328174441 --> Family: # 16 FV at Mutated Child #1 at Generation # 50 : 0.7709930145541918 FV at Mutated Child #2 at Generation # 50 : 0.6343015357600953 --> Family: # 17

FV at Mutated Child #1 at Generation # 50 : 1.1263360009731058 FV at Mutated Child #2 at Generation # 50 : 89.91992824951834 --> Family: # 18

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FV at Mutated Child #1 at Generation # 50 : 0.7179734399507156
FV at Mutated Child #2 at Generation # 50 : 0.741115128876802
--> Family: # 19
FV at Mutated Child #1 at Generation # 50 : 118.15098381337802
FV at Mutated Child #2 at Generation # 50 : 7.436649725348102
--> Family: # 20
FV at Mutated Child #1 at Generation # 50 : 2.616592168034657
FV at Mutated Child #2 at Generation # 50 : 7.370900300405948
--> Family: # 21
FV at Mutated Child #1 at Generation # 50 : 1.931504130783018
FV at Mutated Child #2 at Generation # 50 : 81.80721102225581
--> Family: # 22
FV at Mutated Child #1 at Generation # 50 : 1.1207445305904102
FV at Mutated Child #2 at Generation # 50 : 2.5885182533106055
--> Family: # 23
FV at Mutated Child #1 at Generation # 50 : 0.7165336070097252
FV at Mutated Child #2 at Generation # 50 : 85.84418924570507
--> Family: # 24
FV at Mutated Child #1 at Generation # 50 : 8.299896355759959
FV at Mutated Child #2 at Generation # 50 : 5.962924862241004
--> Family: # 25
FV at Mutated Child #1 at Generation # 50 : 0.7155976011018056
FV at Mutated Child #2 at Generation # 50 : 9.959025124885573
--> Family: # 26
FV at Mutated Child #1 at Generation # 50 : 2326.546293597459
FV at Mutated Child #2 at Generation # 50 : 2386.455585442671
--> Family: # 27
FV at Mutated Child #1 at Generation # 50 : 40.0156442504064
FV at Mutated Child #2 at Generation # 50 : 98.6613187584764
--> Family: # 28
FV at Mutated Child #1 at Generation # 50 : 26.866094978282145
FV at Mutated Child #2 at Generation # 50 : 585.2205280209474
--> Family: # 29
FV at Mutated Child #1 at Generation # 50 : 0.6482153909666011
FV at Mutated Child #2 at Generation # 50 : 0.6369359790258948
--> Family: # 30
FV at Mutated Child #1 at Generation # 50 : 30.35187567632078
FV at Mutated Child #2 at Generation # 50 : 570.6353136179539
--> Family: # 31
FV at Mutated Child #1 at Generation # 50 : 1.1114368050298877
FV at Mutated Child #2 at Generation # 50 : 1.8358547056678938
--> Family: # 32
FV at Mutated Child #1 at Generation # 50 : 9.432170187427111
FV at Mutated Child #2 at Generation # 50 : 6.391165657575672
--> Family: # 33
```

FV at Mutated Child #1 at Generation # 50 : 28.517307097186524 FV at Mutated Child #2 at Generation # 50 : 584.9604114911233 --> Family: # 34 FV at Mutated Child #1 at Generation # 50 : 130.06817685815753 FV at Mutated Child #2 at Generation # 50 : 15.44430514152166 --> Family: # 35 FV at Mutated Child #1 at Generation # 50 : 440.47496728306464 FV at Mutated Child #2 at Generation # 50 : 2.535743659157192 --> Family: # 36 FV at Mutated Child #1 at Generation # 50 : 129.97842421214978 FV at Mutated Child #2 at Generation # 50 : 6.7232878432002 --> Family: # 37 FV at Mutated Child #1 at Generation # 50 : 5.933743701287121 FV at Mutated Child #2 at Generation # 50 : 136.7520749260439 --> Family: # 38 FV at Mutated Child #1 at Generation # 50 : 0.7088162510247016 FV at Mutated Child #2 at Generation # 50 : 5.013627241980548 --> Family: # 39 FV at Mutated Child #1 at Generation # 50 : 12.675406644066943 FV at Mutated Child #2 at Generation # 50 : 0.7225971994398309 --> Family: # 40 FV at Mutated Child #1 at Generation # 50 : 0.6451142953276054 FV at Mutated Child #2 at Generation # 50 : 29.780725074020015 --> Family: # 41 FV at Mutated Child #1 at Generation # 50 : 140.67128246412193 FV at Mutated Child #2 at Generation # 50 : 0.9736046231684853

--> Family: # 42

FV at Mutated Child #1 at Generation # 50 : 132.32849777409172 FV at Mutated Child #2 at Generation # 50 : 0.6254638334230455 --> Family: # 43

FV at Mutated Child #1 at Generation # 50 : 39.22526793554649 FV at Mutated Child #2 at Generation # 50 : 0.6698169209700894 --> Family: # 44

FV at Mutated Child #1 at Generation # 50 : 30.01100463121136 FV at Mutated Child #2 at Generation # 50 : 0.6343015357600953 --> Family: # 45

FV at Mutated Child #1 at Generation # 50 : 2.1129569464821953 FV at Mutated Child #2 at Generation # 50 : 0.9655550988747235 --> Family: # 46

FV at Mutated Child #1 at Generation # 50 : 8.794075827681585 FV at Mutated Child #2 at Generation # 50 : 5.519807108652323 --> Family: # 47

FV at Mutated Child #1 at Generation # 50 : 0.7750467369786406 FV at Mutated Child #2 at Generation # 50 : 5.895504178162751 --> Family: # 48

FV at Mutated Child #1 at Generation # 50 : 1613.9467966174436

FV at Mutated Child #2 at Generation # 50 : 1637.9036926814013 --> Family: # 49 FV at Mutated Child #1 at Generation # 50 : 132.77036744408917 FV at Mutated Child #2 at Generation # 50 : 20.37631492231697 --> Family: # 50 FV at Mutated Child #1 at Generation # 50 : 3.140274918122023 FV at Mutated Child #2 at Generation # 50 : 541.0758625317894 --> Family: # 51 FV at Mutated Child #1 at Generation # 50 : 10.70135544664328 FV at Mutated Child #2 at Generation # 50 : 1.1653466671718262 --> Family: # 52 FV at Mutated Child #1 at Generation # 50 : 18.70332097943042 FV at Mutated Child #2 at Generation # 50 : 0.6986050246796588 --> Family: # 53 FV at Mutated Child #1 at Generation # 50 : 523.4236508422865 FV at Mutated Child #2 at Generation # 50 : 7.150121810190629 --> Family: # 54 FV at Mutated Child #1 at Generation # 50 : 6.247674574680708 FV at Mutated Child #2 at Generation # 50 : 13.627654056989488 --> Family: # 55 FV at Mutated Child #1 at Generation # 50 : 27.65300126102234 FV at Mutated Child #2 at Generation # 50 : 6.803080733412968 --> Family: # 56 FV at Mutated Child #1 at Generation # 50 : 1.1114368050298877 FV at Mutated Child #2 at Generation # 50 : 0.6391164903148145 --> Family: # 57 FV at Mutated Child #1 at Generation # 50 : 5.728710951976797 FV at Mutated Child #2 at Generation # 50 : 117.09483934096897 --> Family: # 58 FV at Mutated Child #1 at Generation # 50 : 4.517023185231284 FV at Mutated Child #2 at Generation # 50 : 1.5335850460280998 --> Family: # 59 FV at Mutated Child #1 at Generation # 50 : 0.7571623240176542 FV at Mutated Child #2 at Generation # 50 : 29.958241253968136 --> Family: # 60 FV at Mutated Child #1 at Generation # 50 : 1.1285801635075177 FV at Mutated Child #2 at Generation # 50 : 469.6974324204158 --> Family: # 61 FV at Mutated Child #1 at Generation # 50 : 118.50114719193516 FV at Mutated Child #2 at Generation # 50 : 5.2566843623990485 --> Family: # 62 FV at Mutated Child #1 at Generation # 50 : 8.72474321521646 FV at Mutated Child #2 at Generation # 50 : 0.6999258915375007 --> Family: # 63 FV at Mutated Child #1 at Generation # 50 : 15.633909967904021

localhost:8888/nbconvert/html/Desktop/Matheuristics/Ex 1 2 3.ipynb?download=false

FV at Mutated Child #2 at Generation # 50 : 0.8202864522555011

--> Family: # 64

FV at Mutated Child #1 at Generation # 50 : 0.9419107872079695 FV at Mutated Child #2 at Generation # 50 : 22.58367230489152 --> Family: # 65

FV at Mutated Child #1 at Generation # 50 : 0.9121401797082774 FV at Mutated Child #2 at Generation # 50 : 0.7117644107710934 --> Family: # 66

FV at Mutated Child #1 at Generation # 50 : 2349.7688853548766 FV at Mutated Child #2 at Generation # 50 : 1483.6430241421176 --> Family: # 67

FV at Mutated Child #1 at Generation # 50 : 6.467615468501152 FV at Mutated Child #2 at Generation # 50 : 0.628088431195575 --> Family: # 68

FV at Mutated Child #1 at Generation # 50 : 0.9065620447662646 FV at Mutated Child #2 at Generation # 50 : 9.212864040778054 --> Family: # 69

FV at Mutated Child #1 at Generation # 50 : 0.9083162832569732 FV at Mutated Child #2 at Generation # 50 : 102.14498239693128 --> Family: # 70

FV at Mutated Child #1 at Generation # 50 : 0.6871626080988481 FV at Mutated Child #2 at Generation # 50 : 28.905510351625647 --> Family: # 71

FV at Mutated Child #1 at Generation # 50 : 0.6865804805770255 FV at Mutated Child #2 at Generation # 50 : 20.32910270108422 --> Family: # 72

FV at Mutated Child #1 at Generation # 50 : 0.8649701040759361 FV at Mutated Child #2 at Generation # 50 : 5.116525205291736 --> Family: # 73

FV at Mutated Child #1 at Generation # 50 : 139.6309442725017 FV at Mutated Child #2 at Generation # 50 : 0.8461808126322161 --> Family: # 74

FV at Mutated Child #1 at Generation # 50 : 574.7232959772493 FV at Mutated Child #2 at Generation # 50 : 4.421279525842767 --> Family: # 75

FV at Mutated Child #1 at Generation # 50 : 1.3469322800201513 FV at Mutated Child #2 at Generation # 50 : 5.106460488318924 --> Family: # 76

FV at Mutated Child #1 at Generation # 50 : 6.253286206564325 FV at Mutated Child #2 at Generation # 50 : 1.3356209172381441 --> Family: # 77

FV at Mutated Child #1 at Generation # 50 : 2.7050396033998116 FV at Mutated Child #2 at Generation # 50 : 134.45984199109816 --> Family: # 78

FV at Mutated Child #1 at Generation # 50 : 1.0006478366786467 FV at Mutated Child #2 at Generation # 50 : 0.8431733026671793 --> Family: # 79

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FV at Mutated Child #1 at Generation # 50 : 102.3911574479548
FV at Mutated Child #2 at Generation # 50 : 136.0783131897415
--> Family: # 80
FV at Mutated Child #1 at Generation # 50 : 1.4824358018043824
FV at Mutated Child #2 at Generation # 50 : 10.166713201647179
--> Generation: # 51
--> Family: # 1
FV at Mutated Child #1 at Generation # 51 : 8.63808602878139
FV at Mutated Child #2 at Generation # 51 : 4.9539521820444525
--> Family: # 2
FV at Mutated Child #1 at Generation # 51 : 40.835952570502435
FV at Mutated Child #2 at Generation # 51 : 1.3380690834268223
--> Family: # 3
FV at Mutated Child #1 at Generation # 51 : 42.078137744898065
FV at Mutated Child #2 at Generation # 51 : 0.9387416940392744
--> Family: # 4
FV at Mutated Child #1 at Generation # 51 : 2.147169981093069
FV at Mutated Child #2 at Generation # 51 : 1.2518715550899353
--> Family: # 5
FV at Mutated Child #1 at Generation # 51 : 35.31175772775364
FV at Mutated Child #2 at Generation # 51 : 1.3053975599176055
--> Family: # 6
FV at Mutated Child #1 at Generation # 51 : 2.2751607380699976
FV at Mutated Child #2 at Generation # 51 : 10.120904681018043
--> Family: # 7
FV at Mutated Child #1 at Generation # 51 : 1.0475827256529704
FV at Mutated Child #2 at Generation # 51 : 1.6549654369930824
--> Family: # 8
FV at Mutated Child #1 at Generation # 51 : 1.915096570608649
FV at Mutated Child #2 at Generation # 51 : 3.8697439203569197
--> Family: # 9
FV at Mutated Child #1 at Generation # 51 : 2.521285356408304
FV at Mutated Child #2 at Generation # 51 : 133.349976332138
--> Family: # 10
FV at Mutated Child #1 at Generation # 51 : 148.29829829604435
FV at Mutated Child #2 at Generation # 51 : 1.855127563995729
--> Family: # 11
FV at Mutated Child #1 at Generation # 51 : 26.802389508719425
FV at Mutated Child #2 at Generation # 51 : 7.765176609173907
--> Family: # 12
FV at Mutated Child #1 at Generation # 51 : 3.5634792716058508
FV at Mutated Child #2 at Generation # 51 : 1.3571545401827994
--> Family: # 13
FV at Mutated Child #1 at Generation # 51 : 625.573681600337
FV at Mutated Child #2 at Generation # 51 : 2.177423886103149
--> Family: # 14
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FV at Mutated Child #1 at Generation # 51 : 2.074367834792164
FV at Mutated Child #2 at Generation # 51 : 5.101601275718802
--> Family: # 15
FV at Mutated Child #1 at Generation # 51 : 139.95224597734224
FV at Mutated Child #2 at Generation # 51 : 31.082935658711218
--> Family: # 16
FV at Mutated Child #1 at Generation # 51 : 140.11586679456602
FV at Mutated Child #2 at Generation # 51 : 618.4693100666348
--> Family: # 17
FV at Mutated Child #1 at Generation # 51 : 4.4281271415355254
FV at Mutated Child #2 at Generation # 51 : 1.0921811194831823
--> Family: # 18
FV at Mutated Child #1 at Generation # 51 : 0.8742684347260655
FV at Mutated Child #2 at Generation # 51 : 1.3639598901987067
--> Family: # 19
FV at Mutated Child #1 at Generation # 51 : 142.62677226125322
FV at Mutated Child #2 at Generation # 51 : 4.612242637382799
--> Family: # 20
FV at Mutated Child #1 at Generation # 51 : 139.9974168330062
FV at Mutated Child #2 at Generation # 51 : 40.61870274682323
--> Family: # 21
FV at Mutated Child #1 at Generation # 51 : 1.147324655565131
FV at Mutated Child #2 at Generation # 51 : 1.6870101357431828
--> Family: # 22
FV at Mutated Child #1 at Generation # 51 : 3.17356064078228
FV at Mutated Child #2 at Generation # 51 : 31.634683216665742
--> Family: # 23
FV at Mutated Child #1 at Generation # 51 : 7.840316670669207
FV at Mutated Child #2 at Generation # 51 : 4.533957661972896
--> Family: # 24
FV at Mutated Child #1 at Generation # 51 : 8.619224351540584
FV at Mutated Child #2 at Generation # 51 : 154.22381725205997
--> Family: # 25
FV at Mutated Child #1 at Generation # 51 : 3.9011951990519234
FV at Mutated Child #2 at Generation # 51 : 79.41580370468132
--> Family: # 26
FV at Mutated Child #1 at Generation # 51 : 492.40334584658933
FV at Mutated Child #2 at Generation # 51 : 1.2850799604304548
--> Family: # 27
FV at Mutated Child #1 at Generation # 51 : 5.49017058047365
FV at Mutated Child #2 at Generation # 51 : 8.484168669433
--> Family: # 28
FV at Mutated Child #1 at Generation # 51 : 27.019200534800024
FV at Mutated Child #2 at Generation # 51 : 107.15188173269402
--> Family: # 29
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FV at Mutated Child #1 at Generation # 51 : 2.8634691124853333 FV at Mutated Child #2 at Generation # 51 : 3.3430346056278353 --> Family: # 30 FV at Mutated Child #1 at Generation # 51 : 1.2637759261228605 FV at Mutated Child #2 at Generation # 51 : 139.70930989078323 --> Family: # 31 FV at Mutated Child #1 at Generation # 51 : 3.3430346056278353 FV at Mutated Child #2 at Generation # 51 : 4.4413132412649405 --> Family: # 32 FV at Mutated Child #1 at Generation # 51 : 2.2241852570261855 FV at Mutated Child #2 at Generation # 51 : 34.91351590562754 --> Family: # 33 FV at Mutated Child #1 at Generation # 51 : 2.9053609337740705 FV at Mutated Child #2 at Generation # 51 : 3.125650238716855 --> Family: # 34 FV at Mutated Child #1 at Generation # 51 : 2.218888563971988 FV at Mutated Child #2 at Generation # 51 : 611.0349580246044 --> Family: # 35 FV at Mutated Child #1 at Generation # 51 : 13.161191644382496 FV at Mutated Child #2 at Generation # 51 : 24.046385620016135 --> Family: # 36 FV at Mutated Child #1 at Generation # 51 : 2.0320000276707635 FV at Mutated Child #2 at Generation # 51 : 9.76133087337419 --> Family: # 37 FV at Mutated Child #1 at Generation # 51 : 0.7204630341377157 FV at Mutated Child #2 at Generation # 51 : 2.605124155138911 --> Family: # 38 FV at Mutated Child #1 at Generation # 51 : 2.724441690472226 FV at Mutated Child #2 at Generation # 51 : 2.160145000312858 --> Family: # 39 FV at Mutated Child #1 at Generation # 51 : 4.017814003425045 FV at Mutated Child #2 at Generation # 51 : 9.834986077954671 --> Family: # 40 FV at Mutated Child #1 at Generation # 51 : 0.7418524476876245 FV at Mutated Child #2 at Generation # 51 : 29.227299615385675 --> Family: # 41 FV at Mutated Child #1 at Generation # 51 : 2.9524948044235817 FV at Mutated Child #2 at Generation # 51 : 3.9583829160302635 --> Family: # 42 FV at Mutated Child #1 at Generation # 51 : 2484.59997741206 FV at Mutated Child #2 at Generation # 51 : 5.476158682464257 --> Family: # 43 FV at Mutated Child #1 at Generation # 51 : 42.49309631060822

FV at Mutated Child #2 at Generation # 51 : 38.33607523143949 --> Family: # 44

FV at Mutated Child #1 at Generation # 51 : 42.17771642334294

FV at Mutated Child #2 at Generation # 51 : 39.641797784623286 --> Family: # 45 FV at Mutated Child #1 at Generation # 51 : 146.95121306254953 FV at Mutated Child #2 at Generation # 51 : 9.614914752203505 --> Family: # 46 FV at Mutated Child #1 at Generation # 51 : 2.9875274869086756 FV at Mutated Child #2 at Generation # 51 : 637.8653156351724 --> Family: # 47 FV at Mutated Child #1 at Generation # 51 : 1.3428825990436843 FV at Mutated Child #2 at Generation # 51 : 2.8990819232715115 --> Family: # 48 FV at Mutated Child #1 at Generation # 51 : 2.699480541058483 FV at Mutated Child #2 at Generation # 51 : 1.6784622834289318 --> Family: # 49 FV at Mutated Child #1 at Generation # 51 : 24.415014123271693 FV at Mutated Child #2 at Generation # 51 : 31.5676250062155 --> Family: # 50 FV at Mutated Child #1 at Generation # 51 : 9.239465789085688 FV at Mutated Child #2 at Generation # 51 : 16.522739247610353 --> Family: # 51 FV at Mutated Child #1 at Generation # 51 : 638.2988800827285 FV at Mutated Child #2 at Generation # 51 : 1.6784622834289318 --> Family: # 52 FV at Mutated Child #1 at Generation # 51 : 589.6805273376273 FV at Mutated Child #2 at Generation # 51 : 12.048710833987224 --> Family: # 53 FV at Mutated Child #1 at Generation # 51 : 10.857525126214055 FV at Mutated Child #2 at Generation # 51 : 1.1857705447118028 --> Family: # 54 FV at Mutated Child #1 at Generation # 51 : 44.15318514820158 FV at Mutated Child #2 at Generation # 51 : 531.7247030442178 --> Family: # 55 FV at Mutated Child #1 at Generation # 51: 0.9299514890696846 FV at Mutated Child #2 at Generation # 51 : 2499.2921039907287 --> Family: # 56 FV at Mutated Child #1 at Generation # 51 : 1.5330745089733318 FV at Mutated Child #2 at Generation # 51 : 1.619027274108375 --> Family: # 57 FV at Mutated Child #1 at Generation # 51 : 1.6535741063608569 FV at Mutated Child #2 at Generation # 51 : 1.2651395055854082 --> Family: # 58 FV at Mutated Child #1 at Generation # 51 : 143.3060866037549 FV at Mutated Child #2 at Generation # 51 : 1.017315696879847 --> Family: # 59 FV at Mutated Child #1 at Generation # 51 : 6.561426765771209 FV at Mutated Child #2 at Generation # 51 : 3.7558786188824436

FV at Mutated Ch.

FV at Mutated Child #1 at Generation # 51 : 521.8276553212603 FV at Mutated Child #2 at Generation # 51 : 38.346916580816355 --> Family: # 61

FV at Mutated Child #1 at Generation # 51 : 11.71099012558564 FV at Mutated Child #2 at Generation # 51 : 2.15483112822863 --> Family: # 62

FV at Mutated Child #1 at Generation # 51 : 31.131188011582964 FV at Mutated Child #2 at Generation # 51 : 617.7240184695873 --> Family: # 63

FV at Mutated Child #1 at Generation # 51 : 7.72361339039602 FV at Mutated Child #2 at Generation # 51 : 5.3615635668364225 --> Family: # 64

FV at Mutated Child #1 at Generation # 51 : 1.1634205289060575 FV at Mutated Child #2 at Generation # 51 : 4.161403230186737 --> Family: # 65

FV at Mutated Child #1 at Generation # 51 : 1.179032755392349
FV at Mutated Child #2 at Generation # 51 : 3.0489350829146287
--> Family: # 66

FV at Mutated Child #1 at Generation # 51 : 6.528902944765369 FV at Mutated Child #2 at Generation # 51 : 2.858379647037652 --> Family: # 67

FV at Mutated Child #1 at Generation # 51 : 3.9969347248037614 FV at Mutated Child #2 at Generation # 51 : 32.99699851740523 --> Family: # 68

FV at Mutated Child #1 at Generation # 51 : 1.4411581130178632 FV at Mutated Child #2 at Generation # 51 : 0.9460912437960596

--> Family: # 69

FV at Mutated Child #1 at Generation # 51 : 35.0337979345159 FV at Mutated Child #2 at Generation # 51 : 37.15790579865507 --> Family: # 70

FV at Mutated Child #1 at Generation # 51 : 6.551152861092398 FV at Mutated Child #2 at Generation # 51 : 0.830870498475121 --> Family: # 71

FV at Mutated Child #1 at Generation # 51 : 3.2240851911277115 FV at Mutated Child #2 at Generation # 51 : 590.7322238514744 --> Family: # 72

FV at Mutated Child #1 at Generation # 51 : 139.94671955051425 FV at Mutated Child #2 at Generation # 51 : 33.72795126411453 --> Family: # 73

FV at Mutated Child #1 at Generation # 51 : 1403.5684938602126 FV at Mutated Child #2 at Generation # 51 : 2328.4735063720327 --> Family: # 74

FV at Mutated Child #1 at Generation # 51 : 146.11652279494464 FV at Mutated Child #2 at Generation # 51 : 42.14608816910871 --> Family: # 75

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FV at Mutated Child #1 at Generation # 51 : 139.25206686253773
FV at Mutated Child #2 at Generation # 51 : 107.90295772387752
--> Family: # 76
FV at Mutated Child #1 at Generation # 51 : 9.719586238457621
FV at Mutated Child #2 at Generation # 51 : 1.0344612215707125
--> Family: # 77
FV at Mutated Child #1 at Generation # 51 : 4.6967310911654465
FV at Mutated Child #2 at Generation # 51 : 1.4881357415524694
--> Family: # 78
FV at Mutated Child #1 at Generation # 51 : 29.881452858718404
FV at Mutated Child #2 at Generation # 51 : 1.095180478601433
--> Family: # 79
FV at Mutated Child #1 at Generation # 51 : 12.851425944306733
FV at Mutated Child #2 at Generation # 51 : 618.3099624759384
--> Family: # 80
FV at Mutated Child #1 at Generation # 51 : 1.3781674692927446
FV at Mutated Child #2 at Generation # 51 : 1.3160229699532275
--> Generation: # 52
--> Family: # 1
FV at Mutated Child #1 at Generation # 52 : 6.368798158939092
FV at Mutated Child #2 at Generation # 52 : 31.297601204896445
--> Family: # 2
FV at Mutated Child #1 at Generation # 52 : 6.024747849250465
FV at Mutated Child #2 at Generation # 52 : 1.2346061112812294
--> Family: # 3
FV at Mutated Child #1 at Generation # 52 : 2.9166413841963124
FV at Mutated Child #2 at Generation # 52 : 32.15687245140243
--> Family: # 4
FV at Mutated Child #1 at Generation # 52 : 3.3146749727113214
FV at Mutated Child #2 at Generation # 52 : 4.999472683820835
--> Family: # 5
FV at Mutated Child #1 at Generation # 52 : 22.49279984561543
FV at Mutated Child #2 at Generation # 52 : 0.7001154581156941
--> Family: # 6
FV at Mutated Child #1 at Generation # 52 : 1.0692916698456703
FV at Mutated Child #2 at Generation # 52 : 4.676907909435961
--> Family: # 7
FV at Mutated Child #1 at Generation # 52 : 133.8240065729847
FV at Mutated Child #2 at Generation # 52 : 422.0958057134831
--> Family: # 8
FV at Mutated Child #1 at Generation # 52 : 1.1591875386910409
FV at Mutated Child #2 at Generation # 52 : 1.3579344091670575
--> Family: # 9
FV at Mutated Child #1 at Generation # 52 : 121.78145211439833
FV at Mutated Child #2 at Generation # 52 : 0.8423512333428529
--> Family: # 10
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FV at Mutated Child #1 at Generation # 52 : 46.18070362731652
FV at Mutated Child #2 at Generation # 52 : 2266.4957161578914
--> Family: # 11
FV at Mutated Child #1 at Generation # 52 : 3.7009656540098277
FV at Mutated Child #2 at Generation # 52 : 0.7948233958472004
--> Family: # 12
FV at Mutated Child #1 at Generation # 52 : 0.6355207781983145
FV at Mutated Child #2 at Generation # 52 : 1.7503230308550357
--> Family: # 13
FV at Mutated Child #1 at Generation # 52 : 1.4555227904800825
FV at Mutated Child #2 at Generation # 52 : 27.24738430449356
--> Family: # 14
FV at Mutated Child #1 at Generation # 52 : 129.61305976460926
FV at Mutated Child #2 at Generation # 52 : 25.65070446832155
--> Family: # 15
FV at Mutated Child #1 at Generation # 52 : 124.69047609052326
FV at Mutated Child #2 at Generation # 52 : 4.225153266673024
--> Family: # 16
FV at Mutated Child #1 at Generation # 52 : 7.830534911624562
FV at Mutated Child #2 at Generation # 52 : 25.35251673871641
--> Family: # 17
FV at Mutated Child #1 at Generation # 52 : 6.909462338799669
FV at Mutated Child #2 at Generation # 52 : 1.0349857015200226
--> Family: # 18
FV at Mutated Child #1 at Generation # 52 : 0.7117644107710934
FV at Mutated Child #2 at Generation # 52 : 5.013627241980548
--> Family: # 19
FV at Mutated Child #1 at Generation # 52 : 0.8948461868908764
FV at Mutated Child #2 at Generation # 52 : 4.327693554441016
--> Family: # 20
FV at Mutated Child #1 at Generation # 52 : 1.1637611684530986
FV at Mutated Child #2 at Generation # 52 : 1.3363383749287605
--> Family: # 21
FV at Mutated Child #1 at Generation # 52 : 26.92027720870827
FV at Mutated Child #2 at Generation # 52 : 136.4674187424972
--> Family: # 22
FV at Mutated Child #1 at Generation # 52 : 2.616592168034657
FV at Mutated Child #2 at Generation # 52 : 125.05317587031352
--> Family: # 23
FV at Mutated Child #1 at Generation # 52 : 0.7750467369786406
FV at Mutated Child #2 at Generation # 52 : 3.6166880091183025
--> Family: # 24
FV at Mutated Child #1 at Generation # 52 : 0.7545247148839109
FV at Mutated Child #2 at Generation # 52 : 0.8965210042816574
--> Family: # 25
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FV at Mutated Child #1 at Generation # 52 : 1.2646250640417231 FV at Mutated Child #2 at Generation # 52 : 19.23160336736082 --> Family: # 26 FV at Mutated Child #1 at Generation # 52 : 119.75408185951161 FV at Mutated Child #2 at Generation # 52 : 4.87601278025258 --> Family: # 27 FV at Mutated Child #1 at Generation # 52 : 127.33295396415492 FV at Mutated Child #2 at Generation # 52 : 0.6293914678019349 --> Family: # 28 FV at Mutated Child #1 at Generation # 52 : 136.63879090974154 FV at Mutated Child #2 at Generation # 52 : 26.616533784556214 --> Family: # 29 FV at Mutated Child #1 at Generation # 52 : 30.01100463121136 FV at Mutated Child #2 at Generation # 52 : 0.6323667504439301 --> Family: # 30 FV at Mutated Child #1 at Generation # 52 : 1.1637611684530986 FV at Mutated Child #2 at Generation # 52 : 565.6450386560226 --> Family: # 31 FV at Mutated Child #1 at Generation # 52 : 19.354100349677832 FV at Mutated Child #2 at Generation # 52 : 594.5484047243868 --> Family: # 32 FV at Mutated Child #1 at Generation # 52 : 31.931531398591797 FV at Mutated Child #2 at Generation # 52 : 557.0773790932958 --> Family: # 33 FV at Mutated Child #1 at Generation # 52 : 549.2420061218249 FV at Mutated Child #2 at Generation # 52 : 141.82918848846438 --> Family: # 34 FV at Mutated Child #1 at Generation # 52 : 0.8405349403200634 FV at Mutated Child #2 at Generation # 52 : 598.3634054101959 --> Family: # 35 FV at Mutated Child #1 at Generation # 52 : 4.412652628017886 FV at Mutated Child #2 at Generation # 52 : 0.6395424908550938 --> Family: # 36 FV at Mutated Child #1 at Generation # 52 : 2.241965713730543 FV at Mutated Child #2 at Generation # 52 : 31.928565141753044 --> Family: # 37 FV at Mutated Child #1 at Generation # 52 : 125.23483897634782 FV at Mutated Child #2 at Generation # 52 : 2403.8819211685927 --> Family: # 38 FV at Mutated Child #1 at Generation # 52 : 29.780725074020015 FV at Mutated Child #2 at Generation # 52 : 0.62761992379862 --> Family: # 39 FV at Mutated Child #1 at Generation # 52 : 25.713982664079417

FV at Mutated Child #2 at Generation # 52 : 7.172586206689231 --> Family: # 40

FV at Mutated Child #1 at Generation # 52 : 18.886391389140336

FV at Mutated Child #2 at Generation # 52 : 0.7074987882344512 --> Family: # 41 FV at Mutated Child #1 at Generation # 52 : 29.6899654524168 FV at Mutated Child #2 at Generation # 52 : 0.7071759433771825 --> Family: # 42 FV at Mutated Child #1 at Generation # 52 : 8.041478045456673 FV at Mutated Child #2 at Generation # 52 : 115.3558358260172 --> Family: # 43 FV at Mutated Child #1 at Generation # 52 : 22.377782540616117 FV at Mutated Child #2 at Generation # 52 : 1.501875802126437 --> Family: # 44 FV at Mutated Child #1 at Generation # 52 : 1.154386139984386 FV at Mutated Child #2 at Generation # 52 : 15.51125199908217 --> Family: # 45 FV at Mutated Child #1 at Generation # 52 : 9.148536177646502 FV at Mutated Child #2 at Generation # 52 : 7.088309102541779 --> Family: # 46 FV at Mutated Child #1 at Generation # 52 : 5.265536987379641 FV at Mutated Child #2 at Generation # 52 : 1.3336567293294168 --> Family: # 47 FV at Mutated Child #1 at Generation # 52 : 25.474064626245458 FV at Mutated Child #2 at Generation # 52 : 141.3793017302796 --> Family: # 48 FV at Mutated Child #1 at Generation # 52 : 0.8252860311312697 FV at Mutated Child #2 at Generation # 52 : 30.714188668163974 --> Family: # 49 FV at Mutated Child #1 at Generation # 52 : 526.7543540088104 FV at Mutated Child #2 at Generation # 52 : 1.8533365996795599 --> Family: # 50 FV at Mutated Child #1 at Generation # 52 : 440.65080065949167 FV at Mutated Child #2 at Generation # 52 : 135.86526133547113 --> Family: # 51 FV at Mutated Child #1 at Generation # 52 : 34.670257111456365 FV at Mutated Child #2 at Generation # 52 : 118.51476452644702 --> Family: # 52 FV at Mutated Child #1 at Generation # 52 : 141.447941344735 FV at Mutated Child #2 at Generation # 52 : 23.160236261381794 --> Family: # 53 FV at Mutated Child #1 at Generation # 52 : 20.60059655371539 FV at Mutated Child #2 at Generation # 52 : 28.696938852592613 --> Family: # 54 FV at Mutated Child #1 at Generation # 52 : 3.590641561918164 FV at Mutated Child #2 at Generation # 52 : 31.704114490065262 --> Family: # 55 FV at Mutated Child #1 at Generation # 52 : 1.0281109961517765 FV at Mutated Child #2 at Generation # 52 : 0.6516871999237099

Ex_1_2_3 --> Family: # 56 FV at Mutated Child #1 at Generation # 52 : 0.6323667504439301 FV at Mutated Child #2 at Generation # 52 : 132.60885989772413 --> Family: # 57 FV at Mutated Child #1 at Generation # 52 : 30.785852693973798 FV at Mutated Child #2 at Generation # 52 : 24.690416310558373 --> Family: # 58 FV at Mutated Child #1 at Generation # 52 : 30.503280055532628 FV at Mutated Child #2 at Generation # 52 : 1.2387164633859493 --> Family: # 59 FV at Mutated Child #1 at Generation # 52 : 404.84844194211826 FV at Mutated Child #2 at Generation # 52 : 7.720525547853317 --> Family: # 60 FV at Mutated Child #1 at Generation # 52 : 0.8900579474788917 FV at Mutated Child #2 at Generation # 52 : 134.45984199109816 --> Family: # 61 FV at Mutated Child #1 at Generation # 52 : 95.26965516399765 FV at Mutated Child #2 at Generation # 52 : 3.5634792716058508 --> Family: # 62 FV at Mutated Child #1 at Generation # 52 : 0.690963414529172 FV at Mutated Child #2 at Generation # 52 : 7.625762733475877 --> Family: # 63 FV at Mutated Child #1 at Generation # 52 : 1.062497951914772 FV at Mutated Child #2 at Generation # 52 : 2.178002973333119 --> Family: # 64 FV at Mutated Child #1 at Generation # 52 : 1.267363702784309 FV at Mutated Child #2 at Generation # 52 : 1.6462619129668241 --> Family: # 65 FV at Mutated Child #1 at Generation # 52 : 497.29911530158114 FV at Mutated Child #2 at Generation # 52 : 1.580846617178871 --> Family: # 66 FV at Mutated Child #1 at Generation # 52 : 136.47214482152683 FV at Mutated Child #2 at Generation # 52 : 1.9877906864059915 --> Family: # 67 FV at Mutated Child #1 at Generation # 52 : 5.793794214112308 FV at Mutated Child #2 at Generation # 52 : 1.8078798907156994 --> Family: # 68 FV at Mutated Child #1 at Generation # 52 : 34.15271778466123 FV at Mutated Child #2 at Generation # 52 : 125.05317587031352 --> Family: # 69 FV at Mutated Child #1 at Generation # 52 : 0.7302620116103441 FV at Mutated Child #2 at Generation # 52 : 0.7266874619609116 --> Family: # 70 FV at Mutated Child #1 at Generation # 52 : 3.5129883962842223

--> Family: # 71

FV at Mutated Child #2 at Generation # 52 : 6.431777166222873

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FV at Mutated Child #1 at Generation # 52 : 7.839467561044105
FV at Mutated Child #2 at Generation # 52 : 6.632933186844472
--> Family: # 72
FV at Mutated Child #1 at Generation # 52 : 393.1532364235278
FV at Mutated Child #2 at Generation # 52 : 82.03822293492921
--> Family: # 73
FV at Mutated Child #1 at Generation # 52 : 26.624870386420778
FV at Mutated Child #2 at Generation # 52 : 143.75869860055712
--> Family: # 74
FV at Mutated Child #1 at Generation # 52 : 0.6893333109535634
FV at Mutated Child #2 at Generation # 52 : 1.8888214698295962
--> Family: # 75
FV at Mutated Child #1 at Generation # 52 : 625.7973310563339
FV at Mutated Child #2 at Generation # 52 : 363.4711292078961
--> Family: # 76
FV at Mutated Child #1 at Generation # 52 : 25.63975886735262
FV at Mutated Child #2 at Generation # 52 : 0.818006642355029
--> Family: # 77
FV at Mutated Child #1 at Generation # 52 : 29.780725074020015
FV at Mutated Child #2 at Generation # 52 : 0.7439511677772116
--> Family: # 78
FV at Mutated Child #1 at Generation # 52 : 594.1919561718028
FV at Mutated Child #2 at Generation # 52 : 0.6652131931828782
--> Family: # 79
FV at Mutated Child #1 at Generation # 52 : 4.123404183533259
FV at Mutated Child #2 at Generation # 52 : 1.1284361420751519
--> Family: # 80
FV at Mutated Child #1 at Generation # 52 : 1.6385489043893675
FV at Mutated Child #2 at Generation # 52 : 6.6637043902576965
--> Generation: # 53
--> Family: # 1
FV at Mutated Child #1 at Generation # 53 : 627.2196936530547
FV at Mutated Child #2 at Generation # 53 : 623.3342140247476
--> Family: # 2
FV at Mutated Child #1 at Generation # 53 : 0.8379844644721253
FV at Mutated Child #2 at Generation # 53 : 54.15993595886406
--> Family: # 3
FV at Mutated Child #1 at Generation # 53 : 30.00848389856325
FV at Mutated Child #2 at Generation # 53 : 38.53877619871827
--> Family: # 4
FV at Mutated Child #1 at Generation # 53 : 119.97917105410966
FV at Mutated Child #2 at Generation # 53 : 30.327387641541254
--> Family: # 5
FV at Mutated Child #1 at Generation # 53 : 144.35479248596437
FV at Mutated Child #2 at Generation # 53 : 1.2908295829789427
--> Family: # 6
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FV at Mutated Child #1 at Generation # 53 : 43.135645141120825
FV at Mutated Child #2 at Generation # 53 : 6.407828431160202
--> Family: # 7
FV at Mutated Child #1 at Generation # 53 : 6.380765048119133
FV at Mutated Child #2 at Generation # 53 : 11.773247391420245
--> Family: # 8
FV at Mutated Child #1 at Generation # 53 : 154.22381725205997
FV at Mutated Child #2 at Generation # 53 : 32.85360152788951
--> Family: # 9
FV at Mutated Child #1 at Generation # 53 : 2317.6267238657656
FV at Mutated Child #2 at Generation # 53 : 2356.8325600843573
--> Family: # 10
FV at Mutated Child #1 at Generation # 53 : 2.1458289133717
FV at Mutated Child #2 at Generation # 53 : 39.39295471737548
--> Family: # 11
FV at Mutated Child #1 at Generation # 53 : 116.53761945341247
FV at Mutated Child #2 at Generation # 53 : 30.91747932528338
--> Family: # 12
FV at Mutated Child #1 at Generation #53: 149.1988960158268
FV at Mutated Child #2 at Generation # 53 : 143.03770278513795
--> Family: # 13
FV at Mutated Child #1 at Generation # 53 : 0.8536093521761148
FV at Mutated Child #2 at Generation # 53 : 2.597851386940826
--> Family: # 14
FV at Mutated Child #1 at Generation # 53 : 1.3185680334517844
FV at Mutated Child #2 at Generation # 53 : 0.8546336946467538
--> Family: # 15
FV at Mutated Child #1 at Generation # 53 : 40.83110644009301
FV at Mutated Child #2 at Generation # 53 : 100.32415926444541
--> Family: # 16
FV at Mutated Child #1 at Generation # 53 : 10.050762666978494
FV at Mutated Child #2 at Generation # 53 : 36.03376265881065
--> Family: # 17
FV at Mutated Child #1 at Generation # 53 : 0.9047199709080187
FV at Mutated Child #2 at Generation # 53 : 28.17496354939246
--> Family: # 18
FV at Mutated Child #1 at Generation # 53 : 154.5214807042209
FV at Mutated Child #2 at Generation # 53 : 40.065504305332894
--> Family: # 19
FV at Mutated Child #1 at Generation # 53 : 643.2116388562322
FV at Mutated Child #2 at Generation # 53 : 1.1426542222182035
--> Family: # 20
FV at Mutated Child #1 at Generation # 53 : 20.06568070180668
FV at Mutated Child #2 at Generation # 53 : 10.091446801123668
--> Family: # 21
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FV at Mutated Child #1 at Generation # 53 : 30.86206217091528 FV at Mutated Child #2 at Generation # 53 : 150.81729783483948 --> Family: # 22 FV at Mutated Child #1 at Generation # 53 : 1.1335626552293714 FV at Mutated Child #2 at Generation # 53 : 559.2677289728251 --> Family: # 23 FV at Mutated Child #1 at Generation # 53 : 136.84463574837613 FV at Mutated Child #2 at Generation # 53 : 30.863261450875 --> Family: # 24 FV at Mutated Child #1 at Generation # 53 : 17.49270075667385 FV at Mutated Child #2 at Generation # 53 : 1.0487202611718263 --> Family: # 25 FV at Mutated Child #1 at Generation # 53 : 7.0595614075117545 FV at Mutated Child #2 at Generation # 53 : 14.603755660411386 --> Family: # 26 FV at Mutated Child #1 at Generation # 53 : 6.492470527668625 FV at Mutated Child #2 at Generation # 53 : 39.75004442711242 --> Family: # 27 FV at Mutated Child #1 at Generation # 53 : 10.695803211365252 FV at Mutated Child #2 at Generation # 53 : 6.852704054504759 --> Family: # 28 FV at Mutated Child #1 at Generation # 53 : 33.131421319560765 FV at Mutated Child #2 at Generation # 53 : 22.833477898565974 --> Family: # 29 FV at Mutated Child #1 at Generation # 53 : 34.88212207297453 FV at Mutated Child #2 at Generation # 53 : 147.54451955507133 --> Family: # 30 FV at Mutated Child #1 at Generation # 53 : 3.4845769994184144 FV at Mutated Child #2 at Generation # 53 : 9.644698560883562 --> Family: # 31 FV at Mutated Child #1 at Generation # 53 : 36.36525065583822 FV at Mutated Child #2 at Generation # 53 : 3.3982994279680265 --> Family: # 32 FV at Mutated Child #1 at Generation # 53 : 541.3621203298649 FV at Mutated Child #2 at Generation # 53 : 32.99699851740523 --> Family: # 33 FV at Mutated Child #1 at Generation # 53 : 1.1715360702685576 FV at Mutated Child #2 at Generation # 53 : 4.1854429573359 --> Family: # 34 FV at Mutated Child #1 at Generation # 53 : 133.86787949892152 FV at Mutated Child #2 at Generation # 53 : 1.8425104700623205 --> Family: # 35 FV at Mutated Child #1 at Generation # 53 : 0.6328409348557754 FV at Mutated Child #2 at Generation # 53 : 2314.358368251175

FV at Mutated Child #1 at Generation # 53 : 33.55038672704354

--> Family: # 36

FV at Mutated Child #2 at Generation # 53 : 2.9929464053781865 --> Family: # 37 FV at Mutated Child #1 at Generation # 53 : 629.4421726120987 FV at Mutated Child #2 at Generation # 53 : 10.857525126214055 --> Family: # 38 FV at Mutated Child #1 at Generation # 53 : 1.1649875985313334 FV at Mutated Child #2 at Generation # 53 : 1.2760837837107672 --> Family: # 39 FV at Mutated Child #1 at Generation # 53 : 589.6805273376273 FV at Mutated Child #2 at Generation # 53 : 1.3160229699532275 --> Family: # 40 FV at Mutated Child #1 at Generation # 53 : 2.090457247054627 FV at Mutated Child #2 at Generation # 53 : 8.268855800982685 --> Family: # 41 FV at Mutated Child #1 at Generation # 53 : 40.055842444178744 FV at Mutated Child #2 at Generation # 53 : 4.295143338939125 --> Family: # 42 FV at Mutated Child #1 at Generation # 53 : 192.56570275992834 FV at Mutated Child #2 at Generation # 53 : 0.8579943184031148 --> Family: # 43 FV at Mutated Child #1 at Generation # 53 : 1.9372513313459883 FV at Mutated Child #2 at Generation # 53 : 2402.8897775536802 --> Family: # 44 FV at Mutated Child #1 at Generation # 53 : 1.6423838627389382 FV at Mutated Child #2 at Generation #53: 3.891345289083276 --> Family: # 45 FV at Mutated Child #1 at Generation #53: 610.6286033506522 FV at Mutated Child #2 at Generation # 53 : 40.4735922331024 --> Family: # 46 FV at Mutated Child #1 at Generation # 53 : 447.73986420954384 FV at Mutated Child #2 at Generation #53: 42.02841779006294 --> Family: # 47 FV at Mutated Child #1 at Generation #53: 9.254091129220384 FV at Mutated Child #2 at Generation #53: 37.70913092951036 --> Family: # 48 FV at Mutated Child #1 at Generation # 53 : 1.2929663164277638 FV at Mutated Child #2 at Generation # 53 : 1.3160229699532275 --> Family: # 49 FV at Mutated Child #1 at Generation # 53 : 557.7908803564233 FV at Mutated Child #2 at Generation # 53 : 0.7814658674465897 --> Family: # 50 FV at Mutated Child #1 at Generation # 53 : 3.159833418085734 FV at Mutated Child #2 at Generation # 53 : 515.019122324808 --> Family: # 51 FV at Mutated Child #1 at Generation # 53 : 107.6034678480066

FV at Mutated Child #2 at Generation # 53 : 1.2298467125094532

--> Family: # 52

FV at Mutated Child #1 at Generation # 53 : 565.053743883656 FV at Mutated Child #2 at Generation # 53 : 1.0326588713832912 --> Family: # 53

FV at Mutated Child #1 at Generation # 53 : 596.0475444521845 FV at Mutated Child #2 at Generation # 53 : 1.6423838627389382

--> Family: # 54

FV at Mutated Child #1 at Generation # 53 : 8.761458088908753 FV at Mutated Child #2 at Generation # 53 : 19.32044647817044 --> Family: # 55

FV at Mutated Child #1 at Generation # 53 : 1.4411581130178632 FV at Mutated Child #2 at Generation # 53 : 37.14770586440526 --> Family: # 56

FV at Mutated Child #1 at Generation # 53 : 1.1237308195137956 FV at Mutated Child #2 at Generation # 53 : 2.1273939006688374 --> Family: # 57

FV at Mutated Child #1 at Generation # 53 : 147.35577209108416 FV at Mutated Child #2 at Generation # 53 : 138.0348695538408 --> Family: # 58

FV at Mutated Child #1 at Generation # 53 : 1.0475827256529704 FV at Mutated Child #2 at Generation # 53 : 1.3086663365218718 --> Family: # 59

FV at Mutated Child #1 at Generation # 53 : 39.39295471737548 FV at Mutated Child #2 at Generation # 53 : 3.206175955126914 --> Family: # 60

FV at Mutated Child #1 at Generation # 53 : 8.886290364197837 FV at Mutated Child #2 at Generation # 53 : 159.91743564430348 --> Family: # 61

FV at Mutated Child #1 at Generation # 53 : 2.7945452364677568 FV at Mutated Child #2 at Generation # 53 : 2.1172141720797892 --> Family: # 62

FV at Mutated Child #1 at Generation # 53 : 504.36916535903805 FV at Mutated Child #2 at Generation # 53 : 2.9929464053781865 --> Family: # 63

FV at Mutated Child #1 at Generation # 53 : 39.11946161446705 FV at Mutated Child #2 at Generation # 53 : 6.1131827297876145 --> Family: # 64

FV at Mutated Child #1 at Generation # 53 : 20.267954188825257 FV at Mutated Child #2 at Generation # 53 : 158.64463544188433 --> Family: # 65

FV at Mutated Child #1 at Generation # 53 : 35.54103205224613 FV at Mutated Child #2 at Generation # 53 : 3.4916989885184337 --> Family: # 66

FV at Mutated Child #1 at Generation # 53 : 6.593932158796918 FV at Mutated Child #2 at Generation # 53 : 2.241877114321474 --> Family: # 67

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FV at Mutated Child #1 at Generation # 53 : 2315.55198595034
FV at Mutated Child #2 at Generation # 53 : 3.79081724166996
--> Family: # 68
FV at Mutated Child #1 at Generation # 53 : 19.426014222128106
FV at Mutated Child #2 at Generation # 53 : 161.07843503821266
--> Family: # 69
FV at Mutated Child #1 at Generation # 53 : 6.352289582663136
FV at Mutated Child #2 at Generation # 53 : 36.09172826826412
--> Family: # 70
FV at Mutated Child #1 at Generation #53:563.5688494776109
FV at Mutated Child #2 at Generation # 53 : 636.8110715884947
--> Family: # 71
FV at Mutated Child #1 at Generation # 53 : 21.476055105412357
FV at Mutated Child #2 at Generation # 53 : 0.8472509337485955
--> Family: # 72
FV at Mutated Child #1 at Generation # 53 : 1.6423838627389382
FV at Mutated Child #2 at Generation # 53 : 7.065909618003759
--> Family: # 73
FV at Mutated Child #1 at Generation # 53 : 2195.2853325754127
FV at Mutated Child #2 at Generation # 53 : 1.6046920402150588
--> Family: # 74
FV at Mutated Child #1 at Generation # 53 : 6.352289582663136
FV at Mutated Child #2 at Generation # 53 : 11.072066211005131
--> Family: # 75
FV at Mutated Child #1 at Generation #53: 19.922904742917876
FV at Mutated Child #2 at Generation # 53 : 35.25307699668443
--> Family: # 76
FV at Mutated Child #1 at Generation # 53 : 1.8224595143952114
FV at Mutated Child #2 at Generation # 53 : 11.814409950217604
--> Family: # 77
FV at Mutated Child #1 at Generation # 53 : 3.5634792716058508
FV at Mutated Child #2 at Generation # 53 : 628.2181961266543
--> Family: # 78
FV at Mutated Child #1 at Generation # 53 : 1.399478494399483
FV at Mutated Child #2 at Generation #53 : 2.237272125854669
--> Family: # 79
FV at Mutated Child #1 at Generation # 53 : 136.95337695462246
FV at Mutated Child #2 at Generation # 53 : 2.058196842043541
--> Family: # 80
FV at Mutated Child #1 at Generation # 53 : 1.022019492509056
FV at Mutated Child #2 at Generation # 53 : 3.3029435327241092
--> Generation: # 54
--> Family: # 1
FV at Mutated Child #1 at Generation # 54 : 9.385212989642707
FV at Mutated Child #2 at Generation # 54 : 0.690963414529172
--> Family: # 2
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FV at Mutated Child #1 at Generation # 54 : 0.8116563509790331
FV at Mutated Child #2 at Generation # 54 : 6.106025548484551
--> Family: # 3
FV at Mutated Child #1 at Generation # 54 : 1.2106818115770022
FV at Mutated Child #2 at Generation # 54 : 30.01100463121136
--> Family: # 4
FV at Mutated Child #1 at Generation # 54 : 2.1129569464821953
FV at Mutated Child #2 at Generation # 54 : 2.8039687032066585
--> Family: # 5
FV at Mutated Child #1 at Generation # 54 : 0.7277006961550285
FV at Mutated Child #2 at Generation # 54 : 6.7232878432002
--> Family: # 6
FV at Mutated Child #1 at Generation # 54 : 0.8551584295586179
FV at Mutated Child #2 at Generation # 54 : 126.85493410599254
--> Family: # 7
FV at Mutated Child #1 at Generation # 54 : 102.73461933588021
FV at Mutated Child #2 at Generation # 54 : 2.1009634824318915
--> Family: # 8
FV at Mutated Child #1 at Generation # 54 : 11.981681850715677
FV at Mutated Child #2 at Generation # 54 : 31.45021256325848
--> Family: # 9
FV at Mutated Child #1 at Generation # 54 : 31.966420951004725
FV at Mutated Child #2 at Generation # 54 : 32.79109990497605
--> Family: # 10
FV at Mutated Child #1 at Generation # 54 : 1.8636800375662652
FV at Mutated Child #2 at Generation # 54 : 0.7439511677772116
--> Family: # 11
FV at Mutated Child #1 at Generation # 54 : 33.273435347858545
FV at Mutated Child #2 at Generation # 54 : 0.9794821290718703
--> Family: # 12
FV at Mutated Child #1 at Generation # 54 : 1.2498993792210702
FV at Mutated Child #2 at Generation # 54 : 470.8570814222207
--> Family: # 13
FV at Mutated Child #1 at Generation # 54 : 3.548756235707987
FV at Mutated Child #2 at Generation # 54 : 2414.1094823952303
--> Family: # 14
FV at Mutated Child #1 at Generation # 54 : 30.580418844766942
FV at Mutated Child #2 at Generation # 54 : 2.9154556216667937
--> Family: # 15
FV at Mutated Child #1 at Generation # 54 : 0.9391624307847748
FV at Mutated Child #2 at Generation # 54 : 0.655189072728734
--> Family: # 16
FV at Mutated Child #1 at Generation # 54 : 1.9224297550437317
FV at Mutated Child #2 at Generation # 54 : 3.5955100006389973
--> Family: # 17
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FV at Mutated Child #1 at Generation # 54 : 139.8690002048128 FV at Mutated Child #2 at Generation # 54 : 26.667909200550117 --> Family: # 18 FV at Mutated Child #1 at Generation # 54 : 0.9349016713930087 FV at Mutated Child #2 at Generation # 54 : 0.7075234248296592 --> Family: # 19 FV at Mutated Child #1 at Generation # 54 : 1.7919127441753462 FV at Mutated Child #2 at Generation # 54 : 4.6049215253111955 --> Family: # 20 FV at Mutated Child #1 at Generation # 54 : 0.6198966661368197 FV at Mutated Child #2 at Generation # 54 : 578.0045906284084 --> Family: # 21 FV at Mutated Child #1 at Generation # 54 : 126.58076106811325 FV at Mutated Child #2 at Generation # 54 : 145.91227796309119 --> Family: # 22 FV at Mutated Child #1 at Generation # 54 : 577.7541387660866 FV at Mutated Child #2 at Generation # 54 : 597.7341469274227 --> Family: # 23 FV at Mutated Child #1 at Generation # 54 : 600.6700558413886 FV at Mutated Child #2 at Generation # 54 : 2.0022435035085295 --> Family: # 24 FV at Mutated Child #1 at Generation # 54 : 23.064198522746313 FV at Mutated Child #2 at Generation # 54 : 28.021645967301986 --> Family: # 25 FV at Mutated Child #1 at Generation # 54 : 593.3589532216151 FV at Mutated Child #2 at Generation # 54 : 6.45772185419831 --> Family: # 26 FV at Mutated Child #1 at Generation # 54 : 7.020409547466217 FV at Mutated Child #2 at Generation # 54 : 7.8741290442616325 --> Family: # 27 FV at Mutated Child #1 at Generation # 54 : 6.625616685289209 FV at Mutated Child #2 at Generation # 54 : 32.16688029851569 --> Family: # 28 FV at Mutated Child #1 at Generation # 54 : 27.716435348752498 FV at Mutated Child #2 at Generation # 54 : 5.338936389392002 --> Family: # 29 FV at Mutated Child #1 at Generation # 54 : 35.24190325977103 FV at Mutated Child #2 at Generation # 54 : 135.8990006633944 --> Family: # 30 FV at Mutated Child #1 at Generation # 54 : 35.05280387437148 FV at Mutated Child #2 at Generation # 54 : 18.87196545458473 --> Family: # 31 FV at Mutated Child #1 at Generation # 54 : 2422.6632312765273 FV at Mutated Child #2 at Generation # 54 : 133.5353332868612

FV at Mutated Child #1 at Generation # 54 : 147.39505103345246

--> Family: # 32

FV at Mutated Child #2 at Generation # 54 : 0.7268850034106713 --> Family: # 33 FV at Mutated Child #1 at Generation # 54 : 7.779056617036389 FV at Mutated Child #2 at Generation # 54 : 147.78989903442618 --> Family: # 34 FV at Mutated Child #1 at Generation # 54 : 2.1306978029533648 FV at Mutated Child #2 at Generation # 54 : 99.69436927106372 --> Family: # 35 FV at Mutated Child #1 at Generation # 54 : 0.7058524504101736 FV at Mutated Child #2 at Generation # 54 : 510.4924779676487 --> Family: # 36 FV at Mutated Child #1 at Generation # 54 : 382.0776866632927 FV at Mutated Child #2 at Generation # 54 : 425.44638266190606 --> Family: # 37 FV at Mutated Child #1 at Generation # 54 : 0.648515030201997 FV at Mutated Child #2 at Generation # 54 : 1.4648256444144414 --> Family: # 38 FV at Mutated Child #1 at Generation # 54 : 22.101424061314688 FV at Mutated Child #2 at Generation # 54 : 599.709258137675 --> Family: # 39 FV at Mutated Child #1 at Generation # 54: 0.95419495609846 FV at Mutated Child #2 at Generation # 54 : 32.79109990497605 --> Family: # 40 FV at Mutated Child #1 at Generation # 54 : 20.837787564223532 FV at Mutated Child #2 at Generation # 54 : 31.836600138668377 --> Family: # 41 FV at Mutated Child #1 at Generation # 54 : 11.8407082150495 FV at Mutated Child #2 at Generation # 54 : 31.174227417505204 --> Family: # 42 FV at Mutated Child #1 at Generation # 54 : 5.886924847604695 FV at Mutated Child #2 at Generation # 54 : 123.12149181175927 --> Family: # 43 FV at Mutated Child #1 at Generation # 54 : 2.026246646303175 FV at Mutated Child #2 at Generation # 54 : 1.306859912043155 --> Family: # 44 FV at Mutated Child #1 at Generation # 54 : 4.271580963014056 FV at Mutated Child #2 at Generation # 54 : 0.7129378294607374 --> Family: # 45 FV at Mutated Child #1 at Generation # 54 : 31.693912734321835 FV at Mutated Child #2 at Generation # 54 : 32.15687245140243 --> Family: # 46 FV at Mutated Child #1 at Generation # 54 : 61.75598803919715 FV at Mutated Child #2 at Generation # 54 : 1.3169876285145445 --> Family: # 47 FV at Mutated Child #1 at Generation # 54 : 64.57084858137848

FV at Mutated Child #2 at Generation # 54 : 84.63074459162259

--> Family: # 48

FV at Mutated Child #1 at Generation # 54 : 31.836600138668377 FV at Mutated Child #2 at Generation # 54 : 425.65356287401715 --> Family: # 49

FV at Mutated Child #1 at Generation # 54 : 0.7997261099649797 FV at Mutated Child #2 at Generation # 54 : 7.050941461736703 --> Family: # 50

FV at Mutated Child #1 at Generation # 54 : 1.1207445305904102 FV at Mutated Child #2 at Generation # 54 : 550.2557319776868 --> Family: # 51

FV at Mutated Child #1 at Generation # 54 : 3.6950748561308737 FV at Mutated Child #2 at Generation # 54 : 71.25806706357203 --> Family: # 52

FV at Mutated Child #1 at Generation # 54 : 133.91892741043316 FV at Mutated Child #2 at Generation # 54 : 7.143869765760132 --> Family: # 53

FV at Mutated Child #1 at Generation # 54 : 78.19601266220772 FV at Mutated Child #2 at Generation # 54 : 1.0006478366786467 --> Family: # 54

FV at Mutated Child #1 at Generation # 54 : 1.2386203303639467 FV at Mutated Child #2 at Generation # 54 : 357.01099110850697 --> Family: # 55

FV at Mutated Child #1 at Generation # 54 : 436.6950397629968 FV at Mutated Child #2 at Generation # 54 : 35.989665567295674 --> Family: # 56

FV at Mutated Child #1 at Generation # 54 : 0.6625679773658308 FV at Mutated Child #2 at Generation # 54 : 15.491066356248258 --> Family: # 57

FV at Mutated Child #1 at Generation # 54 : 0.7117644107710934 FV at Mutated Child #2 at Generation # 54 : 0.9563985000764388 --> Family: # 58

FV at Mutated Child #1 at Generation # 54 : 0.7129378294607374 FV at Mutated Child #2 at Generation # 54 : 2.009682166437296 --> Family: # 59

FV at Mutated Child #1 at Generation # 54 : 6.632933186844472 FV at Mutated Child #2 at Generation # 54 : 0.7636038361544912 --> Family: # 60

FV at Mutated Child #1 at Generation # 54 : 1.1649875985313334 FV at Mutated Child #2 at Generation # 54 : 128.3941630640858 --> Family: # 61

FV at Mutated Child #1 at Generation # 54 : 10.168033703906293 FV at Mutated Child #2 at Generation # 54 : 15.404395050944974 --> Family: # 62

FV at Mutated Child #1 at Generation # 54 : 23.903293466762108 FV at Mutated Child #2 at Generation # 54 : 2525.4193149756647 --> Family: # 63

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FV at Mutated Child #1 at Generation # 54 : 4.120308118170665
FV at Mutated Child #2 at Generation # 54 : 26.376803930673066
--> Family: # 64
FV at Mutated Child #1 at Generation # 54 : 1.7029293931123441
FV at Mutated Child #2 at Generation # 54 : 6.745102193244449
--> Family: # 65
FV at Mutated Child #1 at Generation # 54 : 135.7962872289365
FV at Mutated Child #2 at Generation # 54 : 4.533977029585988
--> Family: # 66
FV at Mutated Child #1 at Generation # 54 : 0.6328409348557754
FV at Mutated Child #2 at Generation # 54 : 589.7373157512088
--> Family: # 67
FV at Mutated Child #1 at Generation # 54 : 32.90679411146801
FV at Mutated Child #2 at Generation # 54 : 0.7103350710499404
--> Family: # 68
FV at Mutated Child #1 at Generation # 54 : 4.533977029585988
FV at Mutated Child #2 at Generation # 54 : 2.54871448249932
--> Family: # 69
FV at Mutated Child #1 at Generation # 54 : 0.6198966661368197
FV at Mutated Child #2 at Generation # 54 : 1.2259337248921116
--> Family: # 70
FV at Mutated Child #1 at Generation # 54 : 25.77928323290017
FV at Mutated Child #2 at Generation # 54 : 6.391165657575672
--> Family: # 71
FV at Mutated Child #1 at Generation # 54 : 45.034291367220554
FV at Mutated Child #2 at Generation # 54 : 20.780924188861636
--> Family: # 72
FV at Mutated Child #1 at Generation # 54 : 3.871857633241009
FV at Mutated Child #2 at Generation # 54 : 16.676535312441835
--> Family: # 73
FV at Mutated Child #1 at Generation # 54 : 0.7302620116103441
FV at Mutated Child #2 at Generation # 54 : 1.4275293101767061
--> Family: # 74
FV at Mutated Child #1 at Generation # 54 : 30.6223765528621
FV at Mutated Child #2 at Generation # 54 : 0.7026420756249643
--> Family: # 75
FV at Mutated Child #1 at Generation # 54 : 136.85006327182577
FV at Mutated Child #2 at Generation # 54 : 26.385689769000383
--> Family: # 76
FV at Mutated Child #1 at Generation # 54 : 0.7658533817686692
FV at Mutated Child #2 at Generation # 54 : 117.87175556560835
--> Family: # 77
FV at Mutated Child #1 at Generation # 54 : 0.7927198333127564
FV at Mutated Child #2 at Generation # 54 : 0.8900579474788917
--> Family: # 78
```

FV at Mutated Child #1 at Generation # 54 : 50.81537352131102 FV at Mutated Child #2 at Generation # 54 : 0.9481024313024254 --> Family: # 79 FV at Mutated Child #1 at Generation # 54 : 8.58964217647761 FV at Mutated Child #2 at Generation # 54 : 0.8551584295586179 --> Family: # 80 FV at Mutated Child #1 at Generation # 54 : 94.52528630650755 FV at Mutated Child #2 at Generation # 54 : 5.108216405836129 --> Generation: # 55 --> Family: # 1 FV at Mutated Child #1 at Generation # 55 : 7.211026909312209 FV at Mutated Child #2 at Generation # 55 : 138.79950300789426 --> Family: # 2 FV at Mutated Child #1 at Generation # 55 : 42.43795414186361 FV at Mutated Child #2 at Generation # 55 : 0.933980793080263 --> Family: # 3 FV at Mutated Child #1 at Generation # 55 : 38.787693218765455 FV at Mutated Child #2 at Generation # 55 : 1.8706635120430501 --> Family: # 4 FV at Mutated Child #1 at Generation # 55 : 8.602957043863935 FV at Mutated Child #2 at Generation # 55 : 9.580891072504476 --> Family: # 5 FV at Mutated Child #1 at Generation # 55 : 1.2480627421500459 FV at Mutated Child #2 at Generation # 55 : 3.06540092867456 --> Family: # 6 FV at Mutated Child #1 at Generation # 55 : 140.30853322858187 FV at Mutated Child #2 at Generation # 55 : 1.4148579705686348 --> Family: # 7 FV at Mutated Child #1 at Generation # 55 : 156.97052303182485 FV at Mutated Child #2 at Generation # 55 : 3.7822973086706875 --> Family: # 8 FV at Mutated Child #1 at Generation # 55 : 16.303204718569845 FV at Mutated Child #2 at Generation # 55 : 152.78245845990168 --> Family: # 9 FV at Mutated Child #1 at Generation # 55 : 11.773247391420245 FV at Mutated Child #2 at Generation # 55 : 7.434421035719769 --> Family: # 10 FV at Mutated Child #1 at Generation # 55 : 3.6696436772093493 FV at Mutated Child #2 at Generation # 55 : 5.473506464344701 --> Family: # 11 FV at Mutated Child #1 at Generation # 55 : 1.1237308195137956 FV at Mutated Child #2 at Generation # 55 : 142.4237516764402 --> Family: # 12 FV at Mutated Child #1 at Generation # 55 : 0.8200820685272765 FV at Mutated Child #2 at Generation # 55 : 8.149535663133179 --> Family: # 13

FV at Mutated Child #1 at Generation # 55 : 1.1421517753455843 FV at Mutated Child #2 at Generation # 55 : 39.707358054501256 --> Family: # 14 FV at Mutated Child #1 at Generation # 55 : 3.7417642246106837 FV at Mutated Child #2 at Generation # 55 : 2.4942369163341773 --> Family: # 15 FV at Mutated Child #1 at Generation # 55 : 2497.564200570242 FV at Mutated Child #2 at Generation # 55 : 3.3702627914561964 --> Family: # 16 FV at Mutated Child #1 at Generation # 55 : 135.75013843122454 FV at Mutated Child #2 at Generation # 55 : 3.323702112414024 --> Family: # 17 FV at Mutated Child #1 at Generation # 55 : 2.727897923880933 FV at Mutated Child #2 at Generation # 55 : 7.230813554622402 --> Family: # 18 FV at Mutated Child #1 at Generation # 55 : 4.244575766467841 FV at Mutated Child #2 at Generation # 55 : 10.688253561672003 --> Family: # 19 FV at Mutated Child #1 at Generation # 55 : 2.561392173538869 FV at Mutated Child #2 at Generation # 55 : 5.5600192952042224 --> Family: # 20 FV at Mutated Child #1 at Generation # 55 : 14.3450901649207 FV at Mutated Child #2 at Generation # 55 : 552.5170754713431 --> Family: # 21 FV at Mutated Child #1 at Generation # 55 : 154.0740401765513 FV at Mutated Child #2 at Generation # 55 : 3.0274674579274654 --> Family: # 22 FV at Mutated Child #1 at Generation # 55 : 2.115944034537585 FV at Mutated Child #2 at Generation # 55 : 0.7745841661443422 --> Family: # 23 FV at Mutated Child #1 at Generation # 55 : 33.22856520832681 FV at Mutated Child #2 at Generation # 55 : 132.2623095997954 --> Family: # 24 FV at Mutated Child #1 at Generation # 55 : 139.46424850749503 FV at Mutated Child #2 at Generation # 55 : 153.82209390955518 --> Family: # 25 FV at Mutated Child #1 at Generation # 55 : 0.8803660976224034 FV at Mutated Child #2 at Generation # 55 : 40.980390799300366 --> Family: # 26 FV at Mutated Child #1 at Generation # 55 : 6.54199982937095 FV at Mutated Child #2 at Generation # 55 : 18.12912129311893 --> Family: # 27 FV at Mutated Child #1 at Generation # 55 : 33.382990121557036

FV at Mutated Child #2 at Generation # 55 : 3.783532795971644

--> Family: # 28

FV at Mutated Child #1 at Generation # 55 : 15.362600941331968

FV at Mutated Child #2 at Generation # 55 : 36.12051931533088 --> Family: # 29 FV at Mutated Child #1 at Generation # 55 : 149.6721777805572 FV at Mutated Child #2 at Generation # 55 : 0.8653813053859557 --> Family: # 30 FV at Mutated Child #1 at Generation # 55 : 3.0067217645874695 FV at Mutated Child #2 at Generation # 55 : 580.2931454498315 --> Family: # 31 FV at Mutated Child #1 at Generation # 55 : 3.819975391563262 FV at Mutated Child #2 at Generation # 55 : 2.830044153460676 --> Family: # 32 FV at Mutated Child #1 at Generation # 55 : 39.518441758271734 FV at Mutated Child #2 at Generation # 55 : 1.3839937302100607 --> Family: # 33 FV at Mutated Child #1 at Generation # 55 : 15.155781917037247 FV at Mutated Child #2 at Generation # 55 : 14.31060007676792 --> Family: # 34 FV at Mutated Child #1 at Generation # 55 : 14.3450901649207 FV at Mutated Child #2 at Generation # 55 : 20.900144740769235 --> Family: # 35 FV at Mutated Child #1 at Generation # 55 : 1.6046920402150588 FV at Mutated Child #2 at Generation # 55 : 32.9408794945294 --> Family: # 36 FV at Mutated Child #1 at Generation # 55 : 15.95093693070396 FV at Mutated Child #2 at Generation # 55 : 1.446070865895578 --> Family: # 37 FV at Mutated Child #1 at Generation # 55 : 0.8038995473340103 FV at Mutated Child #2 at Generation # 55 : 9.432170187427111 --> Family: # 38 FV at Mutated Child #1 at Generation # 55 : 157.56479845318444 FV at Mutated Child #2 at Generation # 55 : 5.408538148241084 --> Family: # 39 FV at Mutated Child #1 at Generation # 55 : 5.436750302923839 FV at Mutated Child #2 at Generation # 55 : 21.970216239834667 --> Family: # 40 FV at Mutated Child #1 at Generation # 55 : 3.1455602010769246 FV at Mutated Child #2 at Generation # 55 : 3.4791344298475635 --> Family: # 41 FV at Mutated Child #1 at Generation # 55 : 0.9321141438443894 FV at Mutated Child #2 at Generation # 55 : 3.872104763531094 --> Family: # 42 FV at Mutated Child #1 at Generation # 55 : 1.0411363867983612 FV at Mutated Child #2 at Generation # 55 : 2.617772214233642 --> Family: # 43 FV at Mutated Child #1 at Generation # 55 : 13.457999640742754 FV at Mutated Child #2 at Generation # 55 : 1.022019492509056

--> Family: # 44

FV at Mutated Child #1 at Generation # 55 : 2.554399505427001 FV at Mutated Child #2 at Generation # 55 : 34.97993214154681

--> Family: # 45

FV at Mutated Child #1 at Generation # 55 : 4.564256998090465 FV at Mutated Child #2 at Generation # 55 : 3.2184372097093648

--> Family: # 46

FV at Mutated Child #1 at Generation # 55 : 129.67156068653486 FV at Mutated Child #2 at Generation # 55 : 10.389439718093595

--> Family: # 47

FV at Mutated Child #1 at Generation # 55 : 2.6991715776983902 FV at Mutated Child #2 at Generation # 55 : 34.68074403752235

--> Family: # 48

FV at Mutated Child #1 at Generation # 55 : 11.549470570959846 FV at Mutated Child #2 at Generation # 55 : 30.00848389856325 --> Family: # 49

FV at Mutated Child #1 at Generation # 55 : 4.736024774807811 FV at Mutated Child #2 at Generation # 55 : 9.614914752203505 --> Family: # 50

FV at Mutated Child #1 at Generation # 55 : 645.9407769258258 FV at Mutated Child #2 at Generation # 55 : 625.6343781811286 --> Family: # 51

FV at Mutated Child #1 at Generation # 55 : 4.5597716679722655 FV at Mutated Child #2 at Generation # 55 : 32.35701004642799 --> Family: # 52

FV at Mutated Child #1 at Generation # 55 : 140.04520095160996 FV at Mutated Child #2 at Generation # 55 : 33.27520560459568 --> Family: # 53

FV at Mutated Child #1 at Generation # 55 : 2.160145000312858 FV at Mutated Child #2 at Generation # 55 : 4.278058264644937 --> Family: # 54

FV at Mutated Child #1 at Generation # 55 : 2.6963412323273213 FV at Mutated Child #2 at Generation # 55 : 157.5233563384594 --> Family: # 55

FV at Mutated Child #1 at Generation # 55 : 140.8155204657949 FV at Mutated Child #2 at Generation # 55 : 23.110583567824598 --> Family: # 56

FV at Mutated Child #1 at Generation # 55 : 37.80586359332277 FV at Mutated Child #2 at Generation # 55 : 41.67546684872425 --> Family: # 57

FV at Mutated Child #1 at Generation # 55 : 41.86352892006477 FV at Mutated Child #2 at Generation # 55 : 3.45674134568116 --> Family: # 58

FV at Mutated Child #1 at Generation # 55 : 5.408538148241084 FV at Mutated Child #2 at Generation # 55 : 152.99338526676576 --> Family: # 59

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FV at Mutated Child #1 at Generation # 55 : 2.6879033625627105
FV at Mutated Child #2 at Generation # 55 : 3.279282645124542
--> Family: # 60
FV at Mutated Child #1 at Generation # 55 : 0.7603295979211905
FV at Mutated Child #2 at Generation # 55 : 2049.2108648099515
--> Family: # 61
FV at Mutated Child #1 at Generation # 55 : 10.458050283803708
FV at Mutated Child #2 at Generation # 55 : 41.60826528562028
--> Family: # 62
FV at Mutated Child #1 at Generation # 55 : 1.3922554964827372
FV at Mutated Child #2 at Generation # 55 : 163.33360539199518
--> Family: # 63
FV at Mutated Child #1 at Generation # 55 : 0.6365798356793109
FV at Mutated Child #2 at Generation # 55 : 519.8051422575483
--> Family: # 64
FV at Mutated Child #1 at Generation # 55 : 9.851452813225476
FV at Mutated Child #2 at Generation # 55 : 2.54204849836206
--> Family: # 65
FV at Mutated Child #1 at Generation # 55 : 544.3861243963696
FV at Mutated Child #2 at Generation # 55 : 1.3202762740646525
--> Family: # 66
FV at Mutated Child #1 at Generation # 55 : 0.8568154990218505
FV at Mutated Child #2 at Generation # 55 : 3.771446960324431
--> Family: # 67
FV at Mutated Child #1 at Generation # 55 : 7.896191310072043
FV at Mutated Child #2 at Generation # 55 : 112.86514871814255
--> Family: # 68
FV at Mutated Child #1 at Generation # 55 : 1.237336981455419
FV at Mutated Child #2 at Generation # 55 : 1.1299598085956941
--> Family: # 69
FV at Mutated Child #1 at Generation # 55 : 2.3346960956930256
FV at Mutated Child #2 at Generation # 55 : 599.2577986277613
--> Family: # 70
FV at Mutated Child #1 at Generation # 55 : 379.9805522848662
FV at Mutated Child #2 at Generation # 55 : 27.44144532993736
--> Family: # 71
FV at Mutated Child #1 at Generation # 55 : 1.0470922894130916
FV at Mutated Child #2 at Generation # 55 : 2.2671036201426396
--> Family: # 72
FV at Mutated Child #1 at Generation # 55 : 3.206175955126914
FV at Mutated Child #2 at Generation # 55 : 42.43795414186361
--> Family: # 73
FV at Mutated Child #1 at Generation # 55 : 3.363473690169969
FV at Mutated Child #2 at Generation # 55 : 4.542160403396721
--> Family: # 74
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Ex 1 2 3 FV at Mutated Child #1 at Generation # 55 : 101.79678427689852 FV at Mutated Child #2 at Generation # 55 : 19.01807430848973 --> Family: # 75 FV at Mutated Child #1 at Generation # 55 : 35.785526206826475 FV at Mutated Child #2 at Generation # 55 : 6.647488070937427 --> Family: # 76 FV at Mutated Child #1 at Generation # 55 : 2270.4454951769317 FV at Mutated Child #2 at Generation # 55 : 3.2184372097093648 --> Family: # 77 FV at Mutated Child #1 at Generation # 55 : 1.1904073715363575 FV at Mutated Child #2 at Generation # 55 : 0.6986050246796588 --> Family: # 78 FV at Mutated Child #1 at Generation # 55 : 590.431483596321 FV at Mutated Child #2 at Generation # 55 : 37.30548881043645 --> Family: # 79 FV at Mutated Child #1 at Generation # 55 : 2.2999981160904492 FV at Mutated Child #2 at Generation # 55 : 1.0487202611718263 --> Family: # 80 FV at Mutated Child #1 at Generation # 55 : 161.47065054787166 FV at Mutated Child #2 at Generation # 55 : 2.803324765710121 --> Generation: # 56 --> Family: # 1 FV at Mutated Child #1 at Generation # 56 : 36.399504164245684 FV at Mutated Child #2 at Generation # 56 : 3.583525508102654 --> Family: # 2 FV at Mutated Child #1 at Generation # 56 : 2459.4860467248 FV at Mutated Child #2 at Generation # 56 : 143.08992925125338 --> Family: # 3 FV at Mutated Child #1 at Generation # 56 : 29.762616610224576 FV at Mutated Child #2 at Generation # 56 : 23.682146392970843 --> Family: # 4 FV at Mutated Child #1 at Generation # 56 : 25.560115820913683 FV at Mutated Child #2 at Generation # 56 : 0.692357124113557 --> Family: # 5 FV at Mutated Child #1 at Generation # 56: 0.6560350283392969 FV at Mutated Child #2 at Generation # 56 : 3.532230597804575 --> Family: # 6 FV at Mutated Child #1 at Generation # 56 : 0.7418524476876245 FV at Mutated Child #2 at Generation # 56 : 3.532230597804575 --> Family: # 7 FV at Mutated Child #1 at Generation # 56 : 33.77321279463266 FV at Mutated Child #2 at Generation # 56 : 4.275050720616732 --> Family: # 8 FV at Mutated Child #1 at Generation # 56 : 6.247674574680708 FV at Mutated Child #2 at Generation # 56 : 2396.705413006423 --> Family: # 9

FV at Mutated Child #1 at Generation # 56 : 3.783532795971644 FV at Mutated Child #2 at Generation # 56 : 2.026246646303175 --> Family: # 10 FV at Mutated Child #1 at Generation # 56 : 6.9894713631927 FV at Mutated Child #2 at Generation # 56 : 0.7948233958472004 --> Family: # 11 FV at Mutated Child #1 at Generation # 56 : 149.87013254230484 FV at Mutated Child #2 at Generation # 56 : 10.37644764475727 --> Family: # 12 FV at Mutated Child #1 at Generation # 56: 0.7948233958472004 FV at Mutated Child #2 at Generation # 56 : 0.6871811896330107 --> Family: # 13 FV at Mutated Child #1 at Generation # 56 : 0.756051005080608 FV at Mutated Child #2 at Generation # 56 : 4.143965247568882 --> Family: # 14 FV at Mutated Child #1 at Generation # 56 : 16.441514110439332 FV at Mutated Child #2 at Generation # 56 : 9.863474768931919 --> Family: # 15 FV at Mutated Child #1 at Generation # 56 : 2.8495645061414865 FV at Mutated Child #2 at Generation # 56 : 33.77321279463266 --> Family: # 16 FV at Mutated Child #1 at Generation # 56 : 4.636278559863323 FV at Mutated Child #2 at Generation # 56 : 2.122298167419073 --> Family: # 17 FV at Mutated Child #1 at Generation # 56 : 107.03305041200896 FV at Mutated Child #2 at Generation # 56 : 7.081990608614762 --> Family: # 18 FV at Mutated Child #1 at Generation # 56 : 0.9083162832569732 FV at Mutated Child #2 at Generation # 56 : 1.2259337248921116 --> Family: # 19 FV at Mutated Child #1 at Generation # 56 : 0.638005737026752 FV at Mutated Child #2 at Generation # 56 : 142.28653260805302 --> Family: # 20

FV at Mutated Child #1 at Generation # 56 : 3.5955100006389973 FV at Mutated Child #2 at Generation # 56 : 477.06083423314703 --> Family: # 21

FV at Mutated Child #1 at Generation # 56 : 135.6979522609113 FV at Mutated Child #2 at Generation # 56 : 4.516191397261594 --> Family: # 22

FV at Mutated Child #1 at Generation # 56: 0.62761992379862 FV at Mutated Child #2 at Generation # 56 : 0.7327800571928077 --> Family: # 23

FV at Mutated Child #1 at Generation # 56 : 19.700587926251114 FV at Mutated Child #2 at Generation # 56 : 7.4534276625594575 --> Family: # 24

FV at Mutated Child #1 at Generation # 56 : 4.97642014441403

FV at Mutated Child #2 at Generation # 56 : 21.946128041373882 --> Family: # 25 FV at Mutated Child #1 at Generation # 56 : 1.4801402877379966 FV at Mutated Child #2 at Generation # 56 : 8.075004094002207 --> Family: # 26 FV at Mutated Child #1 at Generation # 56 : 25.43930223276075 FV at Mutated Child #2 at Generation # 56 : 22.101424061314688 --> Family: # 27 FV at Mutated Child #1 at Generation # 56 : 119.18224757500265 FV at Mutated Child #2 at Generation # 56 : 1.2106818115770022 --> Family: # 28 FV at Mutated Child #1 at Generation # 56 : 3.10363249541846 FV at Mutated Child #2 at Generation # 56 : 0.7347507147104345 --> Family: # 29 FV at Mutated Child #1 at Generation # 56 : 144.63621145794065 FV at Mutated Child #2 at Generation # 56 : 0.7347589449383722 --> Family: # 30 FV at Mutated Child #1 at Generation # 56 : 7.655962471336638 FV at Mutated Child #2 at Generation # 56 : 2.231497179694386 --> Family: # 31 FV at Mutated Child #1 at Generation # 56 : 0.6407757807023412 FV at Mutated Child #2 at Generation # 56 : 31.070814586154473 --> Family: # 32 FV at Mutated Child #1 at Generation # 56 : 8.718398336281838 FV at Mutated Child #2 at Generation # 56 : 0.7004700807893985 --> Family: # 33 FV at Mutated Child #1 at Generation # 56 : 110.78439905088007 FV at Mutated Child #2 at Generation # 56 : 7.020409547466217 --> Family: # 34 FV at Mutated Child #1 at Generation # 56 : 0.6344036733675132 FV at Mutated Child #2 at Generation # 56 : 2.305039581386701 --> Family: # 35 FV at Mutated Child #1 at Generation # 56: 0.7192897764527615 FV at Mutated Child #2 at Generation # 56 : 54744.25950270003 --> Family: # 36 FV at Mutated Child #1 at Generation # 56 : 22.724046156607386 FV at Mutated Child #2 at Generation # 56 : 8.083248687224179 --> Family: # 37 FV at Mutated Child #1 at Generation # 56 : 7.325229497540063 FV at Mutated Child #2 at Generation # 56 : 26.192662478976317 --> Family: # 38 FV at Mutated Child #1 at Generation # 56 : 31.928565141753044 FV at Mutated Child #2 at Generation # 56 : 22.835669346318596 --> Family: # 39 FV at Mutated Child #1 at Generation # 56 : 1.4224475372441252 FV at Mutated Child #2 at Generation # 56 : 22.785718907188457

--> Family: # 40

FV at Mutated Child #1 at Generation # 56 : 0.7182821545658965 FV at Mutated Child #2 at Generation # 56 : 24.07964275242701

--> Family: # 41

FV at Mutated Child #1 at Generation # 56 : 34.337916301375685 FV at Mutated Child #2 at Generation # 56 : 0.675258510025248

--> Family: # 42

FV at Mutated Child #1 at Generation # 56 : 3.8070306914695324 FV at Mutated Child #2 at Generation # 56 : 120.70879302914571 --> Family: # 43

FV at Mutated Child #1 at Generation # 56 : 37.45336991821472 FV at Mutated Child #2 at Generation # 56 : 1.0945915425490482 --> Family: # 44

FV at Mutated Child #1 at Generation # 56 : 4.907495690748093 FV at Mutated Child #2 at Generation # 56 : 0.7382219827500276 --> Family: # 45

FV at Mutated Child #1 at Generation # 56 : 5.741044489382519 FV at Mutated Child #2 at Generation # 56 : 15.306515854450222 --> Family: # 46

FV at Mutated Child #1 at Generation # 56 : 589.2134600922838 FV at Mutated Child #2 at Generation # 56 : 0.9876217184256995 --> Family: # 47

FV at Mutated Child #1 at Generation # 56 : 26.667909200550117
FV at Mutated Child #2 at Generation # 56 : 6.141509965145911

--> Family: # 48

FV at Mutated Child #1 at Generation # 56 : 2.832090458998218 FV at Mutated Child #2 at Generation # 56 : 24.305172595516986 --> Family: # 49

FV at Mutated Child #1 at Generation # 56 : 6.952603678669384 FV at Mutated Child #2 at Generation # 56 : 150.1685011417033 --> Family: # 50

FV at Mutated Child #1 at Generation # 56 : 2.5690066560121503 FV at Mutated Child #2 at Generation # 56 : 0.7036420236485686 --> Family: # 51

FV at Mutated Child #1 at Generation # 56 : 126.86694032339808 FV at Mutated Child #2 at Generation # 56 : 0.7447224557323114 --> Family: # 52

FV at Mutated Child #1 at Generation # 56 : 31.928565141753044 FV at Mutated Child #2 at Generation # 56 : 122.93365580742915 --> Family: # 53

FV at Mutated Child #1 at Generation # 56 : 520.8273546650072 FV at Mutated Child #2 at Generation # 56 : 6.647124498079432 --> Family: # 54

FV at Mutated Child #1 at Generation # 56 : 123.0563379631875 FV at Mutated Child #2 at Generation # 56 : 30.3105307870306

--> Family: # 55

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FV at Mutated Child #1 at Generation # 56 : 0.7133242238421675
FV at Mutated Child #2 at Generation # 56 : 124.69047609052326
--> Family: # 56
FV at Mutated Child #1 at Generation # 56 : 1.368339945907251
FV at Mutated Child #2 at Generation # 56 : 8.138140123901458
--> Family: # 57
FV at Mutated Child #1 at Generation # 56 : 3.059755685141225
FV at Mutated Child #2 at Generation # 56 : 3.451641008844167
--> Family: # 58
FV at Mutated Child #1 at Generation # 56 : 611.3259260818392
FV at Mutated Child #2 at Generation # 56 : 0.7522850999005353
--> Family: # 59
FV at Mutated Child #1 at Generation # 56 : 0.95419495609846
FV at Mutated Child #2 at Generation # 56 : 591.0246193507526
--> Family: # 60
FV at Mutated Child #1 at Generation # 56 : 8.204888133803335
FV at Mutated Child #2 at Generation # 56 : 52.20866816899418
--> Family: # 61
FV at Mutated Child #1 at Generation # 56 : 1.7300080896081904
FV at Mutated Child #2 at Generation # 56 : 0.9083162832569732
--> Family: # 62
FV at Mutated Child #1 at Generation # 56 : 1.8603944448856655
FV at Mutated Child #2 at Generation # 56 : 16.555527680894322
--> Family: # 63
FV at Mutated Child #1 at Generation # 56 : 112.66722003621307
FV at Mutated Child #2 at Generation # 56 : 2473.4058170518806
--> Family: # 64
FV at Mutated Child #1 at Generation # 56 : 2.054637878952482
FV at Mutated Child #2 at Generation # 56 : 1.0665784505593625
--> Family: # 65
FV at Mutated Child #1 at Generation # 56 : 121.60138106273338
FV at Mutated Child #2 at Generation # 56 : 36.75764537574039
--> Family: # 66
FV at Mutated Child #1 at Generation # 56 : 4.604296163004684
FV at Mutated Child #2 at Generation # 56 : 6.909462338799669
--> Family: # 67
FV at Mutated Child #1 at Generation # 56 : 6.911705679778434
FV at Mutated Child #2 at Generation # 56 : 8.382316646900785
--> Family: # 68
FV at Mutated Child #1 at Generation # 56 : 0.7630881612900631
FV at Mutated Child #2 at Generation # 56 : 139.62054755979094
--> Family: # 69
FV at Mutated Child #1 at Generation # 56 : 1.715983074792799
FV at Mutated Child #2 at Generation # 56 : 17.48011910689331
--> Family: # 70
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FV at Mutated Child #1 at Generation # 56 : 2346.50709785046 FV at Mutated Child #2 at Generation # 56 : 39.707358054501256 --> Family: # 71 FV at Mutated Child #1 at Generation # 56 : 1.8793760155326558 FV at Mutated Child #2 at Generation # 56 : 3.5088378706430112 --> Family: # 72 FV at Mutated Child #1 at Generation # 56 : 0.6822975766192652 FV at Mutated Child #2 at Generation # 56 : 1.7606407961865276 --> Family: # 73 FV at Mutated Child #1 at Generation # 56 : 7.195915612681887 FV at Mutated Child #2 at Generation # 56 : 32.83107791862596 --> Family: # 74 FV at Mutated Child #1 at Generation # 56 : 16.400010638366403 FV at Mutated Child #2 at Generation # 56 : 2.3235323625696864 --> Family: # 75 FV at Mutated Child #1 at Generation # 56 : 0.7179734399507156 FV at Mutated Child #2 at Generation # 56 : 3.6213975426431695 --> Family: # 76 FV at Mutated Child #1 at Generation # 56 : 2.5690066560121503 FV at Mutated Child #2 at Generation # 56 : 7.655962471336638 --> Family: # 77 FV at Mutated Child #1 at Generation # 56 : 1.2962847096611307 FV at Mutated Child #2 at Generation # 56 : 2.2195089704302715 --> Family: # 78 FV at Mutated Child #1 at Generation # 56 : 3.8987371395511023 FV at Mutated Child #2 at Generation # 56 : 587.5024642268886 --> Family: # 79 FV at Mutated Child #1 at Generation # 56 : 98.90322649852467 FV at Mutated Child #2 at Generation # 56 : 150.90884807703938 --> Family: # 80 FV at Mutated Child #1 at Generation # 56 : 3.0056623276640217 FV at Mutated Child #2 at Generation # 56 : 1.8636800375662652 --> Generation: # 57 --> Family: # 1 FV at Mutated Child #1 at Generation # 57 : 5.887534272647303 FV at Mutated Child #2 at Generation # 57 : 37.887598320275806 --> Family: # 2 FV at Mutated Child #1 at Generation # 57 : 5.732124973858382 FV at Mutated Child #2 at Generation # 57 : 33.07984447134301 --> Family: # 3 FV at Mutated Child #1 at Generation # 57 : 7.497940976409806 FV at Mutated Child #2 at Generation # 57 : 76.02542544249995 --> Family: # 4 FV at Mutated Child #1 at Generation # 57 : 0.7853471019031733 FV at Mutated Child #2 at Generation # 57 : 508.96027301965387 --> Family: # 5

FV at Mutated Child #1 at Generation # 57 : 3.771446960324431 FV at Mutated Child #2 at Generation # 57 : 40.319749205388575 --> Family: # 6 FV at Mutated Child #1 at Generation # 57 : 2465.167243571624 FV at Mutated Child #2 at Generation # 57 : 57.238092380946256 --> Family: # 7 FV at Mutated Child #1 at Generation # 57 : 3.0868832603209975 FV at Mutated Child #2 at Generation # 57 : 13.590945687638966 --> Family: # 8 FV at Mutated Child #1 at Generation # 57 : 624.5534209742436 FV at Mutated Child #2 at Generation # 57 : 162.45501109054734 --> Family: # 9 FV at Mutated Child #1 at Generation # 57 : 610.4318843297463 FV at Mutated Child #2 at Generation # 57 : 12.050985660084768 --> Family: # 10 FV at Mutated Child #1 at Generation # 57 : 41.915670610305995 FV at Mutated Child #2 at Generation # 57 : 1.9284805163912375 --> Family: # 11 FV at Mutated Child #1 at Generation # 57 : 622.9486000321348 FV at Mutated Child #2 at Generation # 57 : 8.960425426438032 --> Family: # 12 FV at Mutated Child #1 at Generation # 57 : 0.8691926814375928 FV at Mutated Child #2 at Generation # 57 : 1.3177007150214985 --> Family: # 13 FV at Mutated Child #1 at Generation # 57 : 3.297791885283818 FV at Mutated Child #2 at Generation # 57 : 2.8033003578194817 --> Family: # 14 FV at Mutated Child #1 at Generation # 57 : 121.46345279635983 FV at Mutated Child #2 at Generation # 57 : 1.6916459844368013 --> Family: # 15 FV at Mutated Child #1 at Generation # 57 : 27.221227845899666 FV at Mutated Child #2 at Generation # 57 : 11.139613667032425 --> Family: # 16 FV at Mutated Child #1 at Generation # 57 : 2.9500858690972698 FV at Mutated Child #2 at Generation # 57 : 1.1829486374943263 --> Family: # 17 FV at Mutated Child #1 at Generation # 57 : 1.1590749954173416 FV at Mutated Child #2 at Generation # 57 : 3.3702627914561964 --> Family: # 18 FV at Mutated Child #1 at Generation # 57 : 35.123043713376624 FV at Mutated Child #2 at Generation # 57 : 33.07984447134301 --> Family: # 19 FV at Mutated Child #1 at Generation # 57 : 1.083717006238249 FV at Mutated Child #2 at Generation # 57 : 22.629156206887117

FV at Mutated Child #1 at Generation # 57 : 9.504545191436451

--> Family: # 20

FV at Mutated Child #2 at Generation # 57 : 32.301539096508336 --> Family: # 21 FV at Mutated Child #1 at Generation # 57 : 8.713007163813618 FV at Mutated Child #2 at Generation # 57 : 7.389966802404171 --> Family: # 22 FV at Mutated Child #1 at Generation # 57 : 10.019516907411402 FV at Mutated Child #2 at Generation # 57 : 10.050762666978494 --> Family: # 23 FV at Mutated Child #1 at Generation # 57 : 13.748018359662954 FV at Mutated Child #2 at Generation # 57 : 144.6005666531256 --> Family: # 24 FV at Mutated Child #1 at Generation # 57 : 2.583537448448643 FV at Mutated Child #2 at Generation # 57 : 4.384209976254881 --> Family: # 25 FV at Mutated Child #1 at Generation # 57 : 1.6535097818648494 FV at Mutated Child #2 at Generation # 57 : 149.71417627320906 --> Family: # 26 FV at Mutated Child #1 at Generation # 57 : 11.920483498654827 FV at Mutated Child #2 at Generation # 57 : 149.42129924340148 --> Family: # 27 FV at Mutated Child #1 at Generation # 57 : 8.761458088908753 FV at Mutated Child #2 at Generation # 57 : 28.110960347494366 --> Family: # 28 FV at Mutated Child #1 at Generation # 57 : 6.542785047827474 FV at Mutated Child #2 at Generation # 57 : 627.8310422686018 --> Family: # 29 FV at Mutated Child #1 at Generation # 57 : 3.279282645124542 FV at Mutated Child #2 at Generation # 57 : 3.323702112414024 --> Family: # 30 FV at Mutated Child #1 at Generation # 57 : 3.0462047438155055 FV at Mutated Child #2 at Generation # 57 : 131.1632876016647 --> Family: # 31 FV at Mutated Child #1 at Generation # 57 : 37.45336991821472 FV at Mutated Child #2 at Generation # 57 : 1.7971058453818634 --> Family: # 32 FV at Mutated Child #1 at Generation # 57 : 0.8781786352266268 FV at Mutated Child #2 at Generation # 57 : 7.121292772221123 --> Family: # 33 FV at Mutated Child #1 at Generation # 57 : 8.075004094002207 FV at Mutated Child #2 at Generation # 57 : 8.31856017535984 --> Family: # 34 FV at Mutated Child #1 at Generation # 57 : 140.59726977167708 FV at Mutated Child #2 at Generation # 57 : 39.39295471737548 --> Family: # 35 FV at Mutated Child #1 at Generation # 57 : 38.49688436057196

FV at Mutated Child #2 at Generation # 57 : 3.3702627914561964

--> Family: # 36

FV at Mutated Child #1 at Generation # 57 : 39.24107764567996 FV at Mutated Child #2 at Generation # 57 : 0.7148287573887212

--> Family: # 37

FV at Mutated Child #1 at Generation # 57 : 0.9321141438443894 FV at Mutated Child #2 at Generation # 57 : 2.8657622626385177

--> Family: # 38

FV at Mutated Child #1 at Generation # 57 : 27.09373163178554 FV at Mutated Child #2 at Generation # 57 : 31.49902404475547

--> Family: # 39

FV at Mutated Child #1 at Generation # 57 : 633.1212563723547 FV at Mutated Child #2 at Generation # 57 : 7.73498239000465

--> Family: # 40

FV at Mutated Child #1 at Generation # 57 : 0.8422652384681965 FV at Mutated Child #2 at Generation # 57 : 10.27198450696166

--> Family: # 41

FV at Mutated Child #1 at Generation # 57 : 40.51677518975399 FV at Mutated Child #2 at Generation # 57 : 31.09383510500513

--> Family: # 42

FV at Mutated Child #1 at Generation # 57 : 0.8065906701105403 FV at Mutated Child #2 at Generation # 57 : 165.46950023506142

--> Family: # 43

FV at Mutated Child #1 at Generation # 57 : 35.54103205224613
FV at Mutated Child #2 at Generation # 57 : 11.611330278417109

--> Family: # 44

FV at Mutated Child #1 at Generation # 57 : 2.010807957662161 FV at Mutated Child #2 at Generation # 57 : 1.8974298285453295 --> Family: # 45

FV at Mutated Child #1 at Generation # 57 : 29.839281325170838 FV at Mutated Child #2 at Generation # 57 : 22.6498368456515 --> Family: # 46

FV at Mutated Child #1 at Generation # 57 : 27.62671913934059 FV at Mutated Child #2 at Generation # 57 : 10.210715825284145

--> Family: # 47

FV at Mutated Child #1 at Generation # 57 : 0.9020305914602325 FV at Mutated Child #2 at Generation # 57 : 2.8787145349068104

--> Family: # 48

FV at Mutated Child #1 at Generation # 57 : 18.19154825841042 FV at Mutated Child #2 at Generation # 57 : 121.79805275974051

--> Family: # 49

FV at Mutated Child #1 at Generation # 57 : 5.2072102770107636 FV at Mutated Child #2 at Generation # 57 : 11.571908195454984

--> Family: # 50

FV at Mutated Child #1 at Generation # 57 : 9.948679063748246 FV at Mutated Child #2 at Generation # 57 : 3.1629487262520875

--> Family: # 51

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FV at Mutated Child #1 at Generation # 57 : 1.1775326512732565
FV at Mutated Child #2 at Generation # 57 : 2.206539146044003
--> Family: # 52
FV at Mutated Child #1 at Generation # 57 : 166.1348947535855
FV at Mutated Child #2 at Generation # 57 : 2.0694094072079228
--> Family: # 53
FV at Mutated Child #1 at Generation # 57 : 39.089498669981324
FV at Mutated Child #2 at Generation # 57 : 4.6049215253111955
--> Family: # 54
FV at Mutated Child #1 at Generation # 57 : 31.48238832933991
FV at Mutated Child #2 at Generation # 57 : 140.88630441076904
--> Family: # 55
FV at Mutated Child #1 at Generation # 57 : 42.873976507721856
FV at Mutated Child #2 at Generation # 57 : 6.498420419157516
--> Family: # 56
FV at Mutated Child #1 at Generation # 57 : 96.46775748021297
FV at Mutated Child #2 at Generation # 57 : 1.8159745789926751
--> Family: # 57
FV at Mutated Child #1 at Generation # 57 : 0.8539241353600122
FV at Mutated Child #2 at Generation # 57 : 71.02517403769475
--> Family: # 58
FV at Mutated Child #1 at Generation # 57 : 1.0344612215707125
FV at Mutated Child #2 at Generation # 57 : 147.04865745476292
--> Family: # 59
FV at Mutated Child #1 at Generation # 57 : 137.41518580888334
FV at Mutated Child #2 at Generation # 57 : 0.9480734458815319
--> Family: # 60
FV at Mutated Child #1 at Generation # 57 : 1.004686323314013
FV at Mutated Child #2 at Generation # 57 : 1.878412330504077
--> Family: # 61
FV at Mutated Child #1 at Generation # 57 : 0.951303487002259
FV at Mutated Child #2 at Generation # 57 : 3.5727563443224177
--> Family: # 62
FV at Mutated Child #1 at Generation # 57 : 0.8483314917220585
FV at Mutated Child #2 at Generation # 57 : 5.375523988193713
--> Family: # 63
FV at Mutated Child #1 at Generation # 57 : 2.905889092886144
FV at Mutated Child #2 at Generation # 57 : 161.25612842351535
--> Family: # 64
FV at Mutated Child #1 at Generation # 57 : 10.47075976370911
FV at Mutated Child #2 at Generation # 57 : 4.107624420651836
--> Family: # 65
FV at Mutated Child #1 at Generation # 57 : 4.564256998090465
FV at Mutated Child #2 at Generation # 57 : 4.849091384520668
--> Family: # 66
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FV at Mutated Child #1 at Generation # 57 : 6.200473561883219 FV at Mutated Child #2 at Generation # 57 : 584.5758753169748 --> Family: # 67 FV at Mutated Child #1 at Generation # 57 : 2.767913665301259 FV at Mutated Child #2 at Generation # 57 : 40.681185539298305 --> Family: # 68 FV at Mutated Child #1 at Generation # 57 : 0.884333157387449 FV at Mutated Child #2 at Generation # 57 : 12.837935214742943 --> Family: # 69 FV at Mutated Child #1 at Generation # 57 : 1.8513318686417461 FV at Mutated Child #2 at Generation # 57 : 42.18572787409174 --> Family: # 70 FV at Mutated Child #1 at Generation # 57 : 0.8434843616536604 FV at Mutated Child #2 at Generation # 57 : 3.692377768101421 --> Family: # 71 FV at Mutated Child #1 at Generation # 57 : 5.842372017038372 FV at Mutated Child #2 at Generation # 57 : 26.63828659471682 --> Family: # 72 FV at Mutated Child #1 at Generation # 57 : 3.980172218797318 FV at Mutated Child #2 at Generation # 57 : 3.286428892177496 --> Family: # 73 FV at Mutated Child #1 at Generation # 57 : 442.46522388759627 FV at Mutated Child #2 at Generation # 57 : 4.729630916722268 --> Family: # 74 FV at Mutated Child #1 at Generation # 57 : 39.21079706485038 FV at Mutated Child #2 at Generation # 57 : 153.5218541579962 --> Family: # 75 FV at Mutated Child #1 at Generation # 57 : 156.93684747695085 FV at Mutated Child #2 at Generation # 57 : 7.072160824478152 --> Family: # 76 FV at Mutated Child #1 at Generation # 57 : 1.1537496640361307 FV at Mutated Child #2 at Generation # 57 : 27.7065489116466 --> Family: # 77 FV at Mutated Child #1 at Generation # 57 : 37.887598320275806 FV at Mutated Child #2 at Generation # 57 : 2.441970510078882 --> Family: # 78 FV at Mutated Child #1 at Generation # 57 : 5.197126989123488 FV at Mutated Child #2 at Generation # 57 : 3.0306527103076903 --> Family: # 79 FV at Mutated Child #1 at Generation # 57 : 0.817754982739645 FV at Mutated Child #2 at Generation # 57 : 157.2176617324265 --> Family: # 80 FV at Mutated Child #1 at Generation # 57 : 10.27198450696166

FV at Mutated Child #2 at Generation # 57 : 162.1856680760256 --> Generation: # 58 --> Family: # 1

FV at Mutated Child #1 at Generation # 58 : 0.7148287573887212 FV at Mutated Child #2 at Generation # 58 : 1.147324655565131 --> Family: # 2 FV at Mutated Child #1 at Generation # 58 : 27.1344864599765 FV at Mutated Child #2 at Generation # 58 : 0.8916648470430595 --> Family: # 3 FV at Mutated Child #1 at Generation # 58 : 0.8438164585593507 FV at Mutated Child #2 at Generation # 58 : 0.6986050246796588 --> Family: # 4 FV at Mutated Child #1 at Generation # 58 : 7.646155240465049 FV at Mutated Child #2 at Generation # 58 : 3.1323266620242984 --> Family: # 5 FV at Mutated Child #1 at Generation # 58 : 1.1515034504674238 FV at Mutated Child #2 at Generation # 58 : 7.41071233712778 --> Family: # 6 FV at Mutated Child #1 at Generation # 58 : 0.6936633300890866 FV at Mutated Child #2 at Generation # 58 : 18.187937169701478 --> Family: # 7 FV at Mutated Child #1 at Generation # 58 : 4.712087655969654 FV at Mutated Child #2 at Generation # 58 : 0.6254638334230455 --> Family: # 8 FV at Mutated Child #1 at Generation # 58 : 0.6882218871209689 FV at Mutated Child #2 at Generation # 58 : 7.26852236804116 --> Family: # 9 FV at Mutated Child #1 at Generation # 58 : 2.303588062866946 FV at Mutated Child #2 at Generation # 58 : 4.147504133865268 --> Family: # 10 FV at Mutated Child #1 at Generation # 58 : 2.407044222540075 FV at Mutated Child #2 at Generation # 58 : 17.52548242976321 --> Family: # 11 FV at Mutated Child #1 at Generation # 58 : 3.972957248497946 FV at Mutated Child #2 at Generation # 58 : 1.7164127038606884 --> Family: # 12 FV at Mutated Child #1 at Generation # 58 : 6.938622791759963 FV at Mutated Child #2 at Generation # 58 : 3.8843301897659943 --> Family: # 13 FV at Mutated Child #1 at Generation # 58 : 0.7462243008185833 FV at Mutated Child #2 at Generation # 58 : 25.926697416821522 --> Family: # 14 FV at Mutated Child #1 at Generation # 58 : 1.2979349780971208 FV at Mutated Child #2 at Generation # 58 : 2.7338744681088025 --> Family: # 15 FV at Mutated Child #1 at Generation # 58 : 2449.809480478632 FV at Mutated Child #2 at Generation # 58 : 7.438601873115404 --> Family: # 16

FV at Mutated Child #1 at Generation # 58 : 6.398950668988583

FV at Mutated Child #2 at Generation # 58 : 119.03838559940387 --> Family: # 17 FV at Mutated Child #1 at Generation # 58 : 4.564256998090465 FV at Mutated Child #2 at Generation # 58 : 29.958241253968136 --> Family: # 18 FV at Mutated Child #1 at Generation # 58 : 1.0642475848321094 FV at Mutated Child #2 at Generation # 58 : 1.7948591462457846 --> Family: # 19 FV at Mutated Child #1 at Generation # 58 : 1.1787032391570174 FV at Mutated Child #2 at Generation # 58 : 1.3024675196558468 --> Family: # 20 FV at Mutated Child #1 at Generation # 58: 0.7069109161128969 FV at Mutated Child #2 at Generation # 58 : 29.386500797228194 --> Family: # 21 FV at Mutated Child #1 at Generation # 58 : 27.67288495467447 FV at Mutated Child #2 at Generation # 58 : 600.0721170329501 --> Family: # 22 FV at Mutated Child #1 at Generation # 58 : 28.567888779364075 FV at Mutated Child #2 at Generation # 58 : 6.508442030724854 --> Family: # 23 FV at Mutated Child #1 at Generation # 58 : 118.65110164917589 FV at Mutated Child #2 at Generation # 58 : 3.194825818736241 --> Family: # 24 FV at Mutated Child #1 at Generation # 58 : 6.168131174283012 FV at Mutated Child #2 at Generation # 58 : 7.8118341320131615 --> Family: # 25 FV at Mutated Child #1 at Generation # 58 : 4.120308118170665 FV at Mutated Child #2 at Generation # 58 : 0.6849348940856119 --> Family: # 26 FV at Mutated Child #1 at Generation # 58 : 19.70156374838319 FV at Mutated Child #2 at Generation # 58 : 601.7101538047472 --> Family: # 27 FV at Mutated Child #1 at Generation # 58 : 0.6271642638147769 FV at Mutated Child #2 at Generation # 58 : 5.747338709102457 --> Family: # 28 FV at Mutated Child #1 at Generation # 58 : 419.07832400326015 FV at Mutated Child #2 at Generation # 58 : 421.1819799331922 --> Family: # 29 FV at Mutated Child #1 at Generation # 58 : 22.69707949186051 FV at Mutated Child #2 at Generation # 58 : 3.0056623276640217 --> Family: # 30 FV at Mutated Child #1 at Generation # 58 : 33.48653000653016 FV at Mutated Child #2 at Generation # 58 : 1.3248977927419676 --> Family: # 31 FV at Mutated Child #1 at Generation # 58 : 0.7645756200585887 FV at Mutated Child #2 at Generation # 58 : 3.5541001504632055

--> Family: # 32

FV at Mutated Child #1 at Generation # 58 : 31.174227417505204 FV at Mutated Child #2 at Generation # 58 : 0.7328777267452891 --> Family: # 33

FV at Mutated Child #1 at Generation # 58 : 10.381965733703112 FV at Mutated Child #2 at Generation # 58 : 32.69264289833842 --> Family: # 34

FV at Mutated Child #1 at Generation # 58 : 0.937982729486995 FV at Mutated Child #2 at Generation # 58 : 0.8942655780634586 --> Family: # 35

FV at Mutated Child #1 at Generation # 58 : 510.63866943395766 FV at Mutated Child #2 at Generation # 58 : 32.4800203524841 --> Family: # 36

FV at Mutated Child #1 at Generation # 58 : 6.936367738409503 FV at Mutated Child #2 at Generation # 58 : 0.7949146841324674 --> Family: # 37

FV at Mutated Child #1 at Generation # 58 : 35.278741776921954 FV at Mutated Child #2 at Generation # 58 : 13.13028583061361 --> Family: # 38

FV at Mutated Child #1 at Generation # 58 : 138.63938238201757 FV at Mutated Child #2 at Generation # 58 : 22.381610336438644 --> Family: # 39

FV at Mutated Child #1 at Generation # 58 : 4.249771629177213 FV at Mutated Child #2 at Generation # 58 : 2.0894625752956877 --> Family: # 40

FV at Mutated Child #1 at Generation # 58 : 0.8809514164319806 FV at Mutated Child #2 at Generation # 58 : 1.8636800375662652

--> Family: # 41

FV at Mutated Child #1 at Generation # 58 : 31.928565141753044 FV at Mutated Child #2 at Generation # 58 : 149.36159062216373 --> Family: # 42

FV at Mutated Child #1 at Generation # 58 : 2.2195089704302715 FV at Mutated Child #2 at Generation # 58 : 19.815869990210377 --> Family: # 43

FV at Mutated Child #1 at Generation # 58 : 2391.6888548513903 FV at Mutated Child #2 at Generation # 58 : 2234.0293533192353 --> Family: # 44

FV at Mutated Child #1 at Generation # 58 : 4.724899541889581 FV at Mutated Child #2 at Generation # 58 : 2.1895250295398476 --> Family: # 45

FV at Mutated Child #1 at Generation # 58 : 15.29805877265929
FV at Mutated Child #2 at Generation # 58 : 33.51119239960964
--> Family: # 46

FV at Mutated Child #1 at Generation # 58 : 4.8323487648169134 FV at Mutated Child #2 at Generation # 58 : 2.747446614704749 --> Family: # 47

FV at Mutated Child #1 at Generation # 58 : 22.228658113001874 FV at Mutated Child #2 at Generation # 58 : 605.9076641520763 --> Family: # 48 FV at Mutated Child #1 at Generation # 58 : 16.59153022362233 FV at Mutated Child #2 at Generation # 58 : 1.4543839499171984 --> Family: # 49 FV at Mutated Child #1 at Generation # 58 : 7.625762733475877 FV at Mutated Child #2 at Generation # 58 : 7.981758813887714 --> Family: # 50 FV at Mutated Child #1 at Generation # 58 : 3.614315442658695 FV at Mutated Child #2 at Generation # 58 : 412.1299080969686 --> Family: # 51 FV at Mutated Child #1 at Generation # 58 : 148.8767848894364 FV at Mutated Child #2 at Generation # 58 : 19.75656790488896 --> Family: # 52 FV at Mutated Child #1 at Generation # 58 : 15.21333556224285 FV at Mutated Child #2 at Generation # 58 : 0.7557276382182575 --> Family: # 53 FV at Mutated Child #1 at Generation # 58 : 1.2203539815479179 FV at Mutated Child #2 at Generation # 58 : 1.559339247203312 --> Family: # 54 FV at Mutated Child #1 at Generation # 58 : 21.901530514359532 FV at Mutated Child #2 at Generation # 58 : 0.7333872819952167 --> Family: # 55 FV at Mutated Child #1 at Generation # 58 : 77.26840388554065 FV at Mutated Child #2 at Generation # 58 : 0.838966761037787 --> Family: # 56 FV at Mutated Child #1 at Generation # 58 : 1.5823792989617518 FV at Mutated Child #2 at Generation # 58 : 1.0022746961122755 --> Family: # 57 FV at Mutated Child #1 at Generation # 58 : 4.418112636678059 FV at Mutated Child #2 at Generation # 58 : 4.831114162997826 --> Family: # 58 FV at Mutated Child #1 at Generation # 58 : 4.395551849150658 FV at Mutated Child #2 at Generation # 58 : 0.6959268529890142 --> Family: # 59 FV at Mutated Child #1 at Generation # 58 : 1.6946019400726993 FV at Mutated Child #2 at Generation # 58 : 7.331295813176818 --> Family: # 60 FV at Mutated Child #1 at Generation # 58 : 4.228970651300632 FV at Mutated Child #2 at Generation # 58 : 559.118826205847 --> Family: # 61 FV at Mutated Child #1 at Generation # 58 : 6.45772185419831 FV at Mutated Child #2 at Generation # 58 : 17.670994388849422 --> Family: # 62

FV at Mutated Child #1 at Generation # 58 : 8.547028223358964 FV at Mutated Child #2 at Generation # 58 : 1.9428615243359642 --> Family: # 63 FV at Mutated Child #1 at Generation # 58 : 35.81831894403414 FV at Mutated Child #2 at Generation # 58 : 6.877466838576011 --> Family: # 64 FV at Mutated Child #1 at Generation # 58 : 30.651889113637825 FV at Mutated Child #2 at Generation # 58 : 33.97472037359305 --> Family: # 65 FV at Mutated Child #1 at Generation # 58 : 1.8513318686417461 FV at Mutated Child #2 at Generation # 58 : 81.82074119869004 --> Family: # 66 FV at Mutated Child #1 at Generation # 58 : 8.50308626247157 FV at Mutated Child #2 at Generation # 58 : 0.7066334226194073 --> Family: # 67 FV at Mutated Child #1 at Generation # 58 : 68.81815857217427 FV at Mutated Child #2 at Generation # 58: 0.7117644107710934 --> Family: # 68 FV at Mutated Child #1 at Generation # 58 : 33.96240658599049 FV at Mutated Child #2 at Generation # 58 : 102.16317652945983 --> Family: # 69 FV at Mutated Child #1 at Generation # 58 : 2.2143997411557583 FV at Mutated Child #2 at Generation # 58 : 132.23334750891203 --> Family: # 70 FV at Mutated Child #1 at Generation # 58 : 8.247761615870559 FV at Mutated Child #2 at Generation # 58 : 570.7860151101273 --> Family: # 71 FV at Mutated Child #1 at Generation # 58 : 15.027869265818513 FV at Mutated Child #2 at Generation # 58 : 141.6957072641557 --> Family: # 72 FV at Mutated Child #1 at Generation # 58 : 33.833867176452635 FV at Mutated Child #2 at Generation # 58 : 1.4275293101767061 --> Family: # 73 FV at Mutated Child #1 at Generation # 58 : 3.000370186429758 FV at Mutated Child #2 at Generation # 58 : 8.076118109792107 --> Family: # 74 FV at Mutated Child #1 at Generation # 58 : 0.8773556089989569 FV at Mutated Child #2 at Generation # 58 : 5.305983152226352 --> Family: # 75 FV at Mutated Child #1 at Generation # 58 : 19.411799776775876 FV at Mutated Child #2 at Generation # 58 : 3.7215281271469784 --> Family: # 76 FV at Mutated Child #1 at Generation # 58 : 1.047916741449005

FV at Mutated Child #2 at Generation # 58 : 88.3124932331662 --> Family: # 77

FV at Mutated Child #1 at Generation # 58 : 1.6428172163794912

FV at Mutated Child #2 at Generation # 58 : 150.26449596278383 --> Family: # 78 FV at Mutated Child #1 at Generation # 58 : 2.188546439687646 FV at Mutated Child #2 at Generation # 58 : 8.615652625825641 --> Family: # 79 FV at Mutated Child #1 at Generation # 58 : 632.634751710396 FV at Mutated Child #2 at Generation # 58 : 2315.147805832195 --> Family: # 80 FV at Mutated Child #1 at Generation # 58 : 0.772402495967564 FV at Mutated Child #2 at Generation # 58 : 35.26796163905438 --> Generation: # 59 --> Family: # 1 FV at Mutated Child #1 at Generation #59 : 532.6972615993255 FV at Mutated Child #2 at Generation # 59 : 5.816836263535388 --> Family: # 2 FV at Mutated Child #1 at Generation # 59 : 6.737308313195618 FV at Mutated Child #2 at Generation # 59 : 28.51682008512193 --> Family: # 3 FV at Mutated Child #1 at Generation # 59 : 9.307264160849213 FV at Mutated Child #2 at Generation # 59 : 2.1517409969209464 --> Family: # 4 FV at Mutated Child #1 at Generation # 59 : 0.838966761037787 FV at Mutated Child #2 at Generation # 59 : 149.18976460087381 --> Family: # 5 FV at Mutated Child #1 at Generation # 59 : 1.0344612215707125 FV at Mutated Child #2 at Generation # 59 : 33.243405915908596 --> Family: # 6 FV at Mutated Child #1 at Generation # 59 : 2.495446613604121 FV at Mutated Child #2 at Generation # 59 : 1.256561334584697 --> Family: # 7 FV at Mutated Child #1 at Generation # 59 : 11.611330278417109 FV at Mutated Child #2 at Generation # 59 : 30.580418844766942 --> Family: # 8 FV at Mutated Child #1 at Generation # 59 : 6.906873539654245 FV at Mutated Child #2 at Generation #59: 4.7926434389053085 --> Family: # 9 FV at Mutated Child #1 at Generation # 59 : 1.7223776519397869 FV at Mutated Child #2 at Generation # 59 : 7.658998672050621 --> Family: # 10 FV at Mutated Child #1 at Generation # 59 : 144.08535977656808 FV at Mutated Child #2 at Generation # 59 : 0.9385539277683517 --> Family: # 11 FV at Mutated Child #1 at Generation # 59 : 2.9929464053781865 FV at Mutated Child #2 at Generation # 59 : 35.94648023867701 --> Family: # 12 FV at Mutated Child #1 at Generation # 59 : 2.554399505427001

FV at Mutated Child #2 at Generation # 59 : 4.88455306133228 --> Family: # 13 FV at Mutated Child #1 at Generation # 59 : 3.1629487262520875 FV at Mutated Child #2 at Generation # 59 : 127.65148230700936 --> Family: # 14 FV at Mutated Child #1 at Generation # 59 : 3.2631775278039514 FV at Mutated Child #2 at Generation #59: 37.69002454864336 --> Family: # 15 FV at Mutated Child #1 at Generation # 59 : 1.931998938241711 FV at Mutated Child #2 at Generation #59: 0.9731930814602331 --> Family: # 16 FV at Mutated Child #1 at Generation # 59 : 2.5908707166187774 FV at Mutated Child #2 at Generation #59 : 2.605124155138911 --> Family: # 17 FV at Mutated Child #1 at Generation # 59 : 25.986098358501568 FV at Mutated Child #2 at Generation # 59 : 31.677426611546974 --> Family: # 18 FV at Mutated Child #1 at Generation # 59 : 1.6128664991796646 FV at Mutated Child #2 at Generation # 59 : 1.4411581130178632 --> Family: # 19 FV at Mutated Child #1 at Generation # 59 : 9.181255147991404 FV at Mutated Child #2 at Generation #59: 39.30260992280356 --> Family: # 20 FV at Mutated Child #1 at Generation # 59 : 152.61765251963962 FV at Mutated Child #2 at Generation # 59 : 1.8974298285453295 --> Family: # 21 FV at Mutated Child #1 at Generation # 59 : 28.40701942394431 FV at Mutated Child #2 at Generation # 59 : 3.8427751122574447 --> Family: # 22 FV at Mutated Child #1 at Generation # 59 : 0.9817000528149569 FV at Mutated Child #2 at Generation # 59 : 1.92966485349924 --> Family: # 23 FV at Mutated Child #1 at Generation #59: 7.703677288680102 FV at Mutated Child #2 at Generation # 59 : 4.360403788663352 --> Family: # 24 FV at Mutated Child #1 at Generation # 59 : 37.501755943198404 FV at Mutated Child #2 at Generation # 59 : 1.6024818768953535 --> Family: # 25 FV at Mutated Child #1 at Generation # 59 : 133.91892741043316 FV at Mutated Child #2 at Generation # 59 : 27.270646018396448 --> Family: # 26 FV at Mutated Child #1 at Generation # 59 : 7.077837711850454 FV at Mutated Child #2 at Generation # 59 : 2.9053609337740705 --> Family: # 27 FV at Mutated Child #1 at Generation # 59 : 23.06753273048375

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FV at Mutated Child #2 at Generation # 59 : 3.1852909504482785

--> Family: # 28

FV at Mutated Child #1 at Generation # 59 : 0.972706618724175 FV at Mutated Child #2 at Generation # 59 : 11.488581810279342

--> Family: # 29

FV at Mutated Child #1 at Generation # 59 : 2.605124155138911 FV at Mutated Child #2 at Generation # 59 : 7.838038186793029

--> Family: # 30

FV at Mutated Child #1 at Generation # 59 : 114.08919785441944 FV at Mutated Child #2 at Generation # 59 : 2390.536340142028

--> Family: # 31

FV at Mutated Child #1 at Generation # 59 : 0.884333157387449 FV at Mutated Child #2 at Generation # 59 : 39.45452442533933

--> Family: # 32

FV at Mutated Child #1 at Generation # 59 : 152.70979866268814 FV at Mutated Child #2 at Generation # 59 : 32.2196152141248

--> Family: # 33

FV at Mutated Child #1 at Generation # 59 : 102.47751399489393 FV at Mutated Child #2 at Generation # 59 : 2.4572032993994664

--> Family: # 34

FV at Mutated Child #1 at Generation # 59 : 2369.14826299707 FV at Mutated Child #2 at Generation # 59 : 11.251444778761348 --> Family: # 35

FV at Mutated Child #1 at Generation # 59 : 119.97917105410966 FV at Mutated Child #2 at Generation # 59 : 17.065355333796283

--> Family: # 36

FV at Mutated Child #1 at Generation # 59 : 6.561426765771209 FV at Mutated Child #2 at Generation # 59 : 1.012484855187897 --> Family: # 37

FV at Mutated Child #1 at Generation # 59 : 5.5748991276725075 FV at Mutated Child #2 at Generation # 59 : 2.595644385821253

--> Family: # 38

FV at Mutated Child #1 at Generation # 59 : 0.8065906701105403 FV at Mutated Child #2 at Generation # 59 : 29.74437652274378

--> Family: # 39

FV at Mutated Child #1 at Generation # 59 : 7.245649789630239 FV at Mutated Child #2 at Generation # 59 : 153.61932915702275

--> Family: # 40

FV at Mutated Child #1 at Generation # 59 : 3.5451705724473
FV at Mutated Child #2 at Generation # 59 : 2.6292502236336426
--> Family: # 41

FV at Mutated Child #1 at Generation # 59 : 1.310755740918606 FV at Mutated Child #2 at Generation # 59 : 1.0075067737150571 --> Family: # 42

FV at Mutated Child #1 at Generation # 59 : 0.7182821545658965 FV at Mutated Child #2 at Generation # 59 : 3.69127239832912

--> Family: # 43

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FV at Mutated Child #1 at Generation # 59 : 10.883468708277471
FV at Mutated Child #2 at Generation # 59 : 26.018069862725532
--> Family: # 44
FV at Mutated Child #1 at Generation # 59 : 0.8539241353600122
FV at Mutated Child #2 at Generation # 59 : 100.4504555397787
--> Family: # 45
FV at Mutated Child #1 at Generation # 59 : 7.681577241255448
FV at Mutated Child #2 at Generation # 59 : 3.654791177211029
--> Family: # 46
FV at Mutated Child #1 at Generation # 59 : 2385.0091836809543
FV at Mutated Child #2 at Generation # 59 : 620.1168349670897
--> Family: # 47
FV at Mutated Child #1 at Generation # 59 : 575.2142165190196
FV at Mutated Child #2 at Generation # 59 : 2397.7368211154712
--> Family: # 48
FV at Mutated Child #1 at Generation # 59 : 6.593932158796918
FV at Mutated Child #2 at Generation #59: 33.243405915908596
--> Family: # 49
FV at Mutated Child #1 at Generation # 59 : 7.262185032884398
FV at Mutated Child #2 at Generation # 59 : 157.85403152168544
--> Family: # 50
FV at Mutated Child #1 at Generation # 59 : 6.342036518747742
FV at Mutated Child #2 at Generation # 59 : 19.28567169279028
--> Family: # 51
FV at Mutated Child #1 at Generation # 59 : 0.8016177353105083
FV at Mutated Child #2 at Generation # 59 : 16.369290318874327
--> Family: # 52
FV at Mutated Child #1 at Generation # 59 : 2075.5939696124656
FV at Mutated Child #2 at Generation # 59 : 2463.701993819051
--> Family: # 53
FV at Mutated Child #1 at Generation # 59 : 2107.7802635417097
FV at Mutated Child #2 at Generation # 59 : 3.8269055679708726
--> Family: # 54
FV at Mutated Child #1 at Generation # 59 : 2.1273939006688374
FV at Mutated Child #2 at Generation # 59 : 35.85293760678725
--> Family: # 55
FV at Mutated Child #1 at Generation # 59 : 8.820114759644525
FV at Mutated Child #2 at Generation # 59 : 38.09504046752766
--> Family: # 56
FV at Mutated Child #1 at Generation # 59 : 4.724899541889581
FV at Mutated Child #2 at Generation # 59 : 149.18976460087381
--> Family: # 57
FV at Mutated Child #1 at Generation # 59 : 1.458585534406089
FV at Mutated Child #2 at Generation # 59 : 145.33152377718238
--> Family: # 58
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FV at Mutated Child #1 at Generation # 59 : 37.35396175985054 FV at Mutated Child #2 at Generation #59: 63.45988288279757 --> Family: # 59 FV at Mutated Child #1 at Generation # 59 : 535.9526123259413 FV at Mutated Child #2 at Generation # 59 : 6.525046502540755 --> Family: # 60 FV at Mutated Child #1 at Generation # 59 : 3.952247747498453 FV at Mutated Child #2 at Generation #59: 0.8937068389580143 --> Family: # 61 FV at Mutated Child #1 at Generation # 59 : 2.9691890912048344 FV at Mutated Child #2 at Generation # 59 : 123.37518202225421 --> Family: # 62 FV at Mutated Child #1 at Generation # 59 : 1.9762878238810715 FV at Mutated Child #2 at Generation # 59 : 34.21095144724955 --> Family: # 63 FV at Mutated Child #1 at Generation # 59 : 40.32984416811036 FV at Mutated Child #2 at Generation # 59 : 2.495446613604121 --> Family: # 64 FV at Mutated Child #1 at Generation # 59 : 1.7229976517106274 FV at Mutated Child #2 at Generation # 59 : 2416.100298459371 --> Family: # 65 FV at Mutated Child #1 at Generation # 59 : 23.12498382657487 FV at Mutated Child #2 at Generation # 59 : 25.863457149041714 --> Family: # 66 FV at Mutated Child #1 at Generation # 59 : 136.29752170491082 FV at Mutated Child #2 at Generation # 59 : 2.226629360600848 --> Family: # 67 FV at Mutated Child #1 at Generation # 59 : 1.5496178140423327 FV at Mutated Child #2 at Generation # 59 : 0.9299514890696846 --> Family: # 68 FV at Mutated Child #1 at Generation # 59 : 53.0379143128672 FV at Mutated Child #2 at Generation # 59 : 1.0592920459405706 --> Family: # 69 FV at Mutated Child #1 at Generation # 59 : 0.8126611449656267 FV at Mutated Child #2 at Generation # 59 : 10.27198450696166

--> Family: # 70

FV at Mutated Child #1 at Generation # 59 : 5.389973440930953 FV at Mutated Child #2 at Generation # 59 : 159.29640692604463 --> Family: # 71

FV at Mutated Child #1 at Generation # 59 : 145.37785396617656 FV at Mutated Child #2 at Generation # 59 : 8.009744049286898 --> Family: # 72

FV at Mutated Child #1 at Generation # 59 : 6.226622381241963 FV at Mutated Child #2 at Generation # 59 : 6.980965743182166 --> Family: # 73

FV at Mutated Child #1 at Generation # 59 : 2.1784719006607465

FV at Mutated Child #2 at Generation # 59 : 615.5402230455614 --> Family: # 74 FV at Mutated Child #1 at Generation # 59 : 11.88430938144996 FV at Mutated Child #2 at Generation # 59 : 4.63849639710871 --> Family: # 75 FV at Mutated Child #1 at Generation # 59 : 2.54204849836206 FV at Mutated Child #2 at Generation # 59 : 32.76860721365431 --> Family: # 76 FV at Mutated Child #1 at Generation # 59 : 0.8649701040759361 FV at Mutated Child #2 at Generation # 59 : 2.5633409760245707 --> Family: # 77 FV at Mutated Child #1 at Generation # 59 : 610.2229593924277 FV at Mutated Child #2 at Generation #59: 12.512302388819036 --> Family: # 78 FV at Mutated Child #1 at Generation # 59 : 1.3202762740646525 FV at Mutated Child #2 at Generation # 59 : 15.456454906472532 --> Family: # 79 FV at Mutated Child #1 at Generation # 59 : 0.8038995473340103 FV at Mutated Child #2 at Generation # 59 : 1.1426542222182035 --> Family: # 80 FV at Mutated Child #1 at Generation # 59 : 154.22381725205997 FV at Mutated Child #2 at Generation # 59 : 149.71417627320906 --> Generation: # 60 --> Family: # 1 FV at Mutated Child #1 at Generation # 60 : 27.124580449877524 FV at Mutated Child #2 at Generation # 60 : 150.38255968460132 --> Family: # 2 FV at Mutated Child #1 at Generation # 60 : 32.29397111654387 FV at Mutated Child #2 at Generation # 60 : 1.0625292865901776 --> Family: # 3 FV at Mutated Child #1 at Generation # 60 : 0.7838729809970609 FV at Mutated Child #2 at Generation # 60 : 0.7089369811794928 --> Family: # 4 FV at Mutated Child #1 at Generation # 60 : 14.24991856872232 FV at Mutated Child #2 at Generation # 60 : 0.7289597907738316 --> Family: # 5 FV at Mutated Child #1 at Generation # 60 : 4.2925419779582645 FV at Mutated Child #2 at Generation # 60 : 6.597688807335996 --> Family: # 6 FV at Mutated Child #1 at Generation # 60 : 607.4790661742403 FV at Mutated Child #2 at Generation # 60 : 0.7443519978490032 --> Family: # 7 FV at Mutated Child #1 at Generation # 60 : 558.0071851274665 FV at Mutated Child #2 at Generation # 60 : 0.7103350710499404 --> Family: # 8

FV at Mutated Child #1 at Generation # 60 : 33.147564253847385

FV at Mutated Child #2 at Generation # 60 : 131.1691310919308 --> Family: # 9 FV at Mutated Child #1 at Generation # 60 : 6.92656617515312 FV at Mutated Child #2 at Generation # 60 : 7.839467561044105 --> Family: # 10 FV at Mutated Child #1 at Generation # 60 : 4.702844549938518 FV at Mutated Child #2 at Generation # 60 : 26.97230273212961 --> Family: # 11 FV at Mutated Child #1 at Generation # 60 : 132.7676691652685 FV at Mutated Child #2 at Generation # 60 : 0.714570738212559 --> Family: # 12 FV at Mutated Child #1 at Generation # 60 : 1.9981535096506668 FV at Mutated Child #2 at Generation # 60 : 0.8773556089989569 --> Family: # 13 FV at Mutated Child #1 at Generation # 60 : 0.7437548314122528 FV at Mutated Child #2 at Generation # 60 : 21.186668262493274 --> Family: # 14 FV at Mutated Child #1 at Generation # 60 : 3.1403439405984597 FV at Mutated Child #2 at Generation # 60 : 4.257379341084451 --> Family: # 15 FV at Mutated Child #1 at Generation # 60 : 1.089996947400503 FV at Mutated Child #2 at Generation # 60 : 16.303204718569845 --> Family: # 16 FV at Mutated Child #1 at Generation # 60 : 0.8905924858515162 FV at Mutated Child #2 at Generation # 60 : 35.555748922360536 --> Family: # 17 FV at Mutated Child #1 at Generation # 60 : 30.270561706669774 FV at Mutated Child #2 at Generation # 60 : 0.7437548314122528 --> Family: # 18 FV at Mutated Child #1 at Generation # 60 : 22.357159877753414 FV at Mutated Child #2 at Generation # 60 : 24.67372549207825 --> Family: # 19 FV at Mutated Child #1 at Generation # 60 : 23.06753273048375 FV at Mutated Child #2 at Generation # 60 : 2350.45632285679 --> Family: # 20 FV at Mutated Child #1 at Generation # 60 : 4.108133556571691 FV at Mutated Child #2 at Generation # 60 : 148.5725557306646 --> Family: # 21 FV at Mutated Child #1 at Generation # 60 : 7.916003353383924 FV at Mutated Child #2 at Generation # 60 : 121.42811158779246 --> Family: # 22 FV at Mutated Child #1 at Generation # 60 : 48.39327262748801 FV at Mutated Child #2 at Generation # 60 : 1.0411363867983612 --> Family: # 23 FV at Mutated Child #1 at Generation # 60 : 101.91737108690211

FV at Mutated Child #2 at Generation # 60 : 142.97554994779205

--> Family: # 24

FV at Mutated Child #1 at Generation # 60 : 10.626042048098801 FV at Mutated Child #2 at Generation # 60 : 3.4100875736822203

--> Family: # 25

FV at Mutated Child #1 at Generation # 60 : 1.1822143842040163 FV at Mutated Child #2 at Generation # 60 : 3.767094794962686

--> Family: # 26

FV at Mutated Child #1 at Generation # 60 : 8.27193423970204 FV at Mutated Child #2 at Generation # 60 : 9.099218789679188

--> Family: # 27

FV at Mutated Child #1 at Generation # 60 : 5.5531544104563695 FV at Mutated Child #2 at Generation # 60 : 8.450393725323833

--> Family: # 28

FV at Mutated Child #1 at Generation # 60 : 147.28484721391774 FV at Mutated Child #2 at Generation # 60 : 133.07369508560387 --> Family: # 29

FV at Mutated Child #1 at Generation # 60 : 8.611636209147079 FV at Mutated Child #2 at Generation # 60 : 6.567527361294634

--> Family: # 30

FV at Mutated Child #1 at Generation # 60 : 3.8987371395511023 FV at Mutated Child #2 at Generation # 60 : 2.911846484514598

--> Family: # 31

FV at Mutated Child #1 at Generation # 60 : 0.838966761037787 FV at Mutated Child #2 at Generation # 60 : 24.3908650943677

--> Family: # 32

FV at Mutated Child #1 at Generation # 60 : 26.948151487683013 FV at Mutated Child #2 at Generation # 60 : 26.376803930673066 --> Family: # 33

FV at Mutated Child #1 at Generation # 60 : 5.856746990362674 FV at Mutated Child #2 at Generation # 60 : 19.48795293285954 --> Family: # 34

FV at Mutated Child #1 at Generation # 60 : 2290.5816419557013 FV at Mutated Child #2 at Generation # 60 : 2440.151992376258

--> Family: # 35

FV at Mutated Child #1 at Generation # 60 : 7.813330129927611 FV at Mutated Child #2 at Generation # 60 : 2.083327207598545

--> Family: # 36

FV at Mutated Child #1 at Generation # 60 : 2.0554754058567672 FV at Mutated Child #2 at Generation # 60 : 0.6910897980736563 --> Family: # 37

FV at Mutated Child #1 at Generation # 60 : 2.0320000276707635 FV at Mutated Child #2 at Generation # 60 : 9.49150473003948 --> Family: # 38

FV at Mutated Child #1 at Generation # 60 : 1.1729131130848807 FV at Mutated Child #2 at Generation # 60 : 32.59345259900307

--> Family: # 39

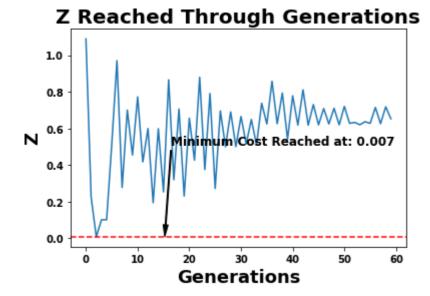
```
FV at Mutated Child #1 at Generation # 60 : 0.8844544653768481
FV at Mutated Child #2 at Generation # 60 : 0.7283948852981229
--> Family: # 40
FV at Mutated Child #1 at Generation # 60 : 3.6586777835656603
FV at Mutated Child #2 at Generation # 60 : 2.1940152381438986
--> Family: # 41
FV at Mutated Child #1 at Generation # 60 : 142.86824254418224
FV at Mutated Child #2 at Generation # 60 : 29.018916184572355
--> Family: # 42
FV at Mutated Child #1 at Generation # 60 : 564.8670447714393
FV at Mutated Child #2 at Generation # 60 : 142.28653260805302
--> Family: # 43
FV at Mutated Child #1 at Generation # 60 : 0.738986236300597
FV at Mutated Child #2 at Generation # 60 : 141.61483146905357
--> Family: # 44
FV at Mutated Child #1 at Generation # 60 : 8.083034762475364
FV at Mutated Child #2 at Generation # 60 : 3.6754247296760045
--> Family: # 45
FV at Mutated Child #1 at Generation # 60 : 541.3912236442272
FV at Mutated Child #2 at Generation # 60 : 5.882729585155726
--> Family: # 46
FV at Mutated Child #1 at Generation # 60 : 0.7606698230995214
FV at Mutated Child #2 at Generation # 60 : 0.7152552382660181
--> Family: # 47
FV at Mutated Child #1 at Generation # 60 : 8.317349479815837
FV at Mutated Child #2 at Generation # 60 : 87.7076538556499
--> Family: # 48
FV at Mutated Child #1 at Generation # 60 : 3.2576344888655306
FV at Mutated Child #2 at Generation # 60 : 7.722129528138327
--> Family: # 49
FV at Mutated Child #1 at Generation # 60 : 31.0212383001443
FV at Mutated Child #2 at Generation # 60 : 3.915862551849741
--> Family: # 50
FV at Mutated Child #1 at Generation # 60 : 0.6586464555632645
FV at Mutated Child #2 at Generation # 60 : 0.7323033055796462
--> Family: # 51
FV at Mutated Child #1 at Generation # 60 : 29.740070894304544
FV at Mutated Child #2 at Generation # 60 : 131.72770184946114
--> Family: # 52
FV at Mutated Child #1 at Generation # 60 : 0.7133242238421675
FV at Mutated Child #2 at Generation # 60 : 6.938622791759963
--> Family: # 53
FV at Mutated Child #1 at Generation # 60 : 143.75869860055712
FV at Mutated Child #2 at Generation # 60 : 6.295121732483803
--> Family: # 54
```

FV at Mutated Child #1 at Generation # 60 : 86.57253215884818 FV at Mutated Child #2 at Generation # 60 : 565.5259763679068 --> Family: # 55 FV at Mutated Child #1 at Generation # 60 : 59.02149889191434 FV at Mutated Child #2 at Generation # 60 : 123.60419090651189 --> Family: # 56 FV at Mutated Child #1 at Generation # 60 : 4.160964788630866 FV at Mutated Child #2 at Generation # 60 : 1.6678894010327072 --> Family: # 57 FV at Mutated Child #1 at Generation # 60 : 7.981758813887714 FV at Mutated Child #2 at Generation # 60 : 14.201608982193738 --> Family: # 58 FV at Mutated Child #1 at Generation # 60 : 0.7328777267452891 FV at Mutated Child #2 at Generation # 60 : 1.4801402877379966 --> Family: # 59 FV at Mutated Child #1 at Generation # 60 : 129.7250991364128 FV at Mutated Child #2 at Generation # 60 : 1.7466612772795682 --> Family: # 60 FV at Mutated Child #1 at Generation # 60 : 113.33372643893387 FV at Mutated Child #2 at Generation # 60 : 2.101361782849286 --> Family: # 61 FV at Mutated Child #1 at Generation # 60 : 0.7058524504101736 FV at Mutated Child #2 at Generation # 60 : 46.63358898540988 --> Family: # 62 FV at Mutated Child #1 at Generation # 60 : 33.17191395318531 FV at Mutated Child #2 at Generation # 60 : 26.069486509099345 --> Family: # 63 FV at Mutated Child #1 at Generation # 60 : 133.0512012952653 FV at Mutated Child #2 at Generation # 60 : 1.592649631911495 --> Family: # 64 FV at Mutated Child #1 at Generation # 60 : 2.1475249500205633 FV at Mutated Child #2 at Generation # 60 : 0.7275655772128365 --> Family: # 65 FV at Mutated Child #1 at Generation # 60 : 9.97598684563171 FV at Mutated Child #2 at Generation # 60 : 137.32228158112736 --> Family: # 66 FV at Mutated Child #1 at Generation # 60 : 30.446947117366783 FV at Mutated Child #2 at Generation # 60 : 5.398508602301667 --> Family: # 67 FV at Mutated Child #1 at Generation # 60 : 1.9541878354087507 FV at Mutated Child #2 at Generation # 60 : 34.07358654491065 --> Family: # 68 FV at Mutated Child #1 at Generation # 60 : 0.6965157242271217

FV at Mutated Child #2 at Generation # 60 : 149.6594606359004 --> Family: # 69

FV at Mutated Child #1 at Generation # 60 : 0.6864956343480264

FV at Mutated Child #2 at Generation # 60 : 4.397075784916167 --> Family: # 70 FV at Mutated Child #1 at Generation # 60 : 0.8551584295586179 FV at Mutated Child #2 at Generation # 60 : 5.228920057422462 --> Family: # 71 FV at Mutated Child #1 at Generation # 60 : 0.7323033055796462 FV at Mutated Child #2 at Generation # 60 : 2.0320000276707635 --> Family: # 72 FV at Mutated Child #1 at Generation # 60 : 28.829086984838174 FV at Mutated Child #2 at Generation # 60 : 4.391861719252 --> Family: # 73 FV at Mutated Child #1 at Generation # 60 : 0.8105714969237167 FV at Mutated Child #2 at Generation # 60 : 6.0460749053196885 --> Family: # 74 FV at Mutated Child #1 at Generation # 60 : 2400.5165158957857 FV at Mutated Child #2 at Generation # 60 : 0.7498414805751628 --> Family: # 75 FV at Mutated Child #1 at Generation # 60 : 3.748015172918111 FV at Mutated Child #2 at Generation # 60 : 22.95088628773612 --> Family: # 76 FV at Mutated Child #1 at Generation # 60 : 1.327887576345494 FV at Mutated Child #2 at Generation # 60 : 8.62397553702894 --> Family: # 77 FV at Mutated Child #1 at Generation # 60 : 7.850545988876959 FV at Mutated Child #2 at Generation # 60 : 2.455722583451617 --> Family: # 78 FV at Mutated Child #1 at Generation # 60 : 32.107719490094304 FV at Mutated Child #2 at Generation # 60 : 8.410673706415995 --> Family: # 79 FV at Mutated Child #1 at Generation # 60 : 0.8030967394604819 FV at Mutated Child #2 at Generation # 60 : 1.9428615243359642 --> Family: # 80 FV at Mutated Child #1 at Generation # 60 : 0.6526215396698528 FV at Mutated Child #2 at Generation # 60 : 1.2663881755240762 Min in all Generation: [[3.0, 0.007026102139009082, 1.0, 0.0, 0.0, 1.0, 0. 0.0, 0.0, 0.0, 1.0, 0.0, 0.0, 0.0]Min in Cost: [0.0070261]



X After: 0.9479916982053469 Y After: 0.9052618727872055 OF After: 0.007026102139009082

In [168]:

hide_toggle(for_next=True)

Out[168]:

show/hide code next cell

In [61]:

```
from IPython.display import HTML
def hide_toggle(for_next=False):
    this cell = """$('div.cell.code cell.rendered.selected')"""
    next cell = this cell + '.next()'
    toggle text = 'show/hide code' # text shown on toggle link
    target_cell = this_cell # target cell to control with toggle
    js_hide_current = '' # bit of JS to permanently hide code in current cell (only wh
en toggling next cell)
    if for_next:
        target_cell = next_cell
        toggle_text += ' next cell'
        js_hide_current = this_cell + '.find("div.input").hide();'
    js_f_name = 'code_toggle_{}'.format(str(random.randint(1,2**64)))
    html = """
        <script>
            function {f_name}() {{
                {cell_selector}.find('div.input').toggle();
            }}
            {js_hide_current}
        </script>
        <a href="javascript:{f_name}()">{toggle_text}</a>
    """.format(
       f_name=js_f_name,
        cell_selector=target_cell,
        js_hide_current=js_hide_current,
        toggle_text=toggle_text
    )
    return HTML(html)
```

Egcrate function

Let's start with a simple Simulated anealing code , and try to find the egcrate fucntion optimumum

```
In [400]:
```

```
hide_toggle(for_next=True)
```

Out[400]:

show/hide code next cell

In [398]:

```
x0 = 2 # Initial solution we want to start at
y0 = 1

k = 0.1
T0 = 1000
M = 300
```

```
N = 15
alpha = 0.85
z_{int} = x0**2+y0**2+25*(math.sin(x0)**2+math.sin(y0)**2)
print("Initial X is %.3f" % x0)
print("Initial Y is %.3f" % y0)
print("Initial Z is %.3f" % z_int)
temp = []
min_z = []
for i in range(M):
    for j in range(N):
        xt = 0
        yt = 0
        ran_x_1 = np.random.rand()
        ran_x_2 = np.random.rand()
        ran_y_1 = np.random.rand()
        ran_y_2 = np.random.rand()
        if ran_x_1 >= 0.5:
            x1 = k*ran_x_2
        else:
            x1 = -k*ran x 2
        if ran_y_1 >= 0.5:
            y1 = k*ran_y_2
        else:
            y1 = -k*ran_y_2
        xt = x0+x1
        yt = y0+y1
        of_new = xt**2+yt**2+25*(math.sin(xt)**2+math.sin(yt)**2)
        of current = x0**2+y0**2+25*(math.sin(x0)**2+math.sin(y0)**2)
        ran 1 = np.random.rand()
        form = 1/(np.exp((of_new-of_current)/T0))
        if of new <= of current:</pre>
            x0 = xt
            y0 = yt
        elif ran_1<=form:</pre>
            x0 = xt
            y0 = yt
        else:
            x0 = x0
            v0 = v0
    temp = np.append(temp,T0)
    min_z = np.append(min_z,of_current)
    T0 = alpha*T0
print("X is %.3f" % x0)
print("Y is %.3f" % y0)
```

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```
print("Final OF is %.3f" % of_current)

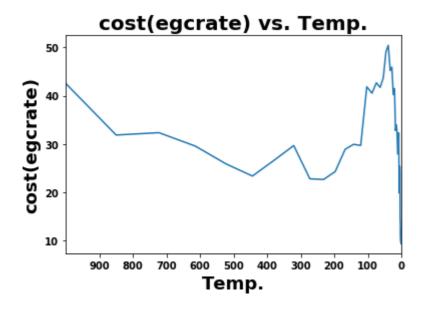
plt.plot(temp,min_z)
plt.title("cost(egcrate) vs. Temp.",fontsize=20, fontweight='bold')
plt.xlabel("Temp.",fontsize=18, fontweight='bold')
plt.ylabel("cost(egcrate)",fontsize=18, fontweight='bold')

plt.xlim(1000,0)
plt.xticks(np.arange(min(temp),max(temp),100),fontweight='bold')
plt.yticks(fontweight='bold')

plt.show()
```

```
Initial X is 2.000
Initial Y is 1.000
Initial Z is 43.372
X is -0.000
Y is 3.022
Final OF is 9.488
```

C:\ProgramData\Anaconda3\lib\site-packages\ipykernel_launcher.py:51: Runti
meWarning: divide by zero encountered in double_scalars



The egcrate function global minimum can be catched more oftenly using S.A than gradient based methods however the run time is higher using stochastic methods and though the cpu pressure is higher (operations / cycle)