**Below are some of the interesting cases that I got from execution of the program.**

**Case 1**

How many time and force pairs do you want to input?

3

Input the time moment in seconds

4

Input the respective force (in Newtons) of time moment 4.0 .

You must input force between -300N and 300N included!

100

Input the time moment in seconds

8

Input the respective force (in Newtons) of time moment 8.0 .

You must input force between -300N and 300N included!

200

Input the time moment in seconds

10

Input the respective force (in Newtons) of time moment 10.0 .

You must input force between -300N and 300N included!

150

Now you must input masses of the objects and their initial positions.

Input mass M1 of object 1.You must input mass between 0kg and 10kg included!

5

Input the initial position of the object M1.

Notice that you must input 2 numbers (x and y coordinates).

0

0

Input mass M2 of object 2. You must input mass between 0kg and 10kg included!

2

Input the initial position of the object M2.

Notice that you must input 2 numbers (x and y coordinates).

-1

5

Input mass M3 of object 2. You must input mass between 0kg and 10kg included!

3

Input the initial position of the object M3.

Notice that you must input 2 numbers (x and y coordinates).

3

3

Now you must input frictions

You must input frictions between 0 and 0.5 included!

Please input friction myu1 between object M1 and table

0.2

Please input friction myu2 between object M1 and M2

0.3

Please input friction myu3 between object M1 and M3

0.1

At what time moment would you like to se the dispositions of M1, M2 and M3

6

**M1 is at position [ -2.0204081632653077 ; 0.0 ] at time 6.0**

**M2 is at position [ -23.660714285714285 ; -17.660714285714285 ] at time 6.0**

**M3 is at position [ 3.0 ; -19.660714285714285 ] at time 6.0**

**Case 2**

How many time and force pairs do you want to input?

3

Input the time moment in seconds

0.2

Input the respective force (in Newtons) of time moment 0.2 .

You must input force between -300N and 300N included!

15

Input the time moment in seconds

0.8

Input the respective force (in Newtons) of time moment 0.8 .

You must input force between -300N and 300N included!

100

Input the time moment in seconds

15

Input the respective force (in Newtons) of time moment 15.0 .

You must input force between -300N and 300N included!

300

Now you must input masses of the objects and their initial positions.

Input mass M1 of object 1.You must input mass between 0kg and 10kg included!

10

Input the initial position of the object M1.

Notice that you must input 2 numbers (x and y coordinates).

5

5

Input mass M2 of object 2. You must input mass between 0kg and 10kg included!

3

Input the initial position of the object M2.

Notice that you must input 2 numbers (x and y coordinates).

3

3

Input mass M3 of object 2. You must input mass between 0kg and 10kg included!

4

Input the initial position of the object M3.

Notice that you must input 2 numbers (x and y coordinates).

4

4

Now you must input frictions

You must input frictions between 0 and 0.5 included!

Please input friction myu1 between object M1 and table

0.1

Please input friction myu2 between object M1 and M2

0.5

Please input friction myu3 between object M1 and M3

0.2

At what time moment would you like to se the dispositions of M1, M2 and M3

20

**M1 is at position [ 3168.461538461538 ; 5.0 ] at time 20.0**

**M2 is at position [ -14747.0 ; -14747.0 ] at time 20.0**

**M3 is at position [ 4.0 ; -14746.0 ] at time 20.0**

**Case 3**

How many time and force pairs do you want to input?

3

Input the time moment in seconds

0.2

Input the respective force (in Newtons) of time moment 0.2 .

You must input force between -300N and 300N included!

-300

Input the time moment in seconds

0.6

Input the respective force (in Newtons) of time moment 0.6 .

You must input force between -300N and 300N included!

-250

Input the time moment in seconds

6

Input the respective force (in Newtons) of time moment 6.0 .

You must input force between -300N and 300N included!

0

Now you must input masses of the objects and their initial positions.

Input mass M1 of object 1.You must input mass between 0kg and 10kg included!

10

Input the initial position of the object M1.

Notice that you must input 2 numbers (x and y coordinates).

2

3

Input mass M2 of object 2. You must input mass between 0kg and 10kg included!

2

Input the initial position of the object M2.

Notice that you must input 2 numbers (x and y coordinates).

0

3

Input mass M3 of object 2. You must input mass between 0kg and 10kg included!

6

Input the initial position of the object M3.

Notice that you must input 2 numbers (x and y coordinates).

0

0

Now you must input frictions

You must input frictions between 0 and 0.5 included!

Please input friction myu1 between object M1 and table

0.1

Please input friction myu2 between object M1 and M2

0.2

Please input friction myu3 between object M1 and M3

0.3

At what time moment would you like to see the dispositions of M1, M2 and M3

0.3

**M1 is at position [ 1.7269740634005766 ; 3.0 ] at time 0.3**

**M2 is at position [ 1.6801729106628238 ; 4.680172910662824 ] at time 0.3**

**M3 is at position [ 0.0 ; 1.6801729106628238 ] at time 0.3**