Documentation of the fields module

Repository cloning in your projects

To clone the repository type the following code in your terminal:

```
git clone https://github.com/Mani80624/Linear-Algebra.git
```

Now you can use the fields module, keep in mind that to clone you need the repository to be in the same path as your projects.

First module (fields)

In this module has by goals provide solutions of operations with fields through the import of module fields that we have create

Import the class Field of module fields

For import the class Field of module fields is necesary write the next line in your projects:

```
from fields import Field
```

Now you can use the methods that this module has.

To create a new object Field

For you create a new object Field, you need to write:

```
field_1 = Field("This class to resive the number data, you write the field")
```

Description of the Methods of the fields module

Method `show_field()`

If you want to get the field you are working on, you can use the `show_field()` method as shown in the following example:

```
field_1.show_field()
```

Method `change_field()`

If you want to change the field in which you work this method can help, in the following line you can see how to do this:

```
field_1.change_field("New field number")
```

This method receives a data of type numeric.

Method `additive_inverse()`

This method you return a dictionary of additive inverse of the field elements, for you use this method you can see the next line:

```
inverse_add_field_1 = field_1.additive_inverse()
# You can to print the list
print(inverse_add_field_1)
```

Method `multiplicative_inverse()`

This method you return a dictionary of multiplicative inverse of the field elements, for you use this method you can see the next line:

```
inverse_mult_field_1 = field_1.multiplicative_inverse()
# You can print the list
print(inverse_mult_field_1)resive
```

Method `operations()`

This method performs operations of addition, multiplication of numbers in the same field, if you want to use the method you can use the following line:

```
field_1.operations(value_1, value_2,..., value_n)
```

The values should to be integer numbers.