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OOP

Programming Language: Python

14575

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```
1 import csv
2 import sympy as sp
3 import numpy as np
4 import matplotlib.pyplot as plt
5
6 class Grapher:
7     def __init__(self, x, y):
8         self.x = x
9         self.y = y
10
11     def showGraph(self):
12         plt.plot(self.x, self.y)
13
14     def graph(self):
15         plt.plot(self.x, self.y)
16         plt.xlabel('x')
17         plt.ylabel('y')
18         plt.title('Graph')
19         plt.legend()
20         plt.grid(True)
21         plt.show()
22
23 class EquationFinder(Grapher): # Herencia de Grapher
24     def __init__(self, file_path):
25         super().__init__([], []) # Llama al constructor de la clase base
26         print("Vamos a encontrar la ecuación de una ecuación cuadrática")
27         self.loadData(file_path)
28
29     def loadData(self, file_path):
30         with open(file_path, newline='', encoding='latin-1') as csvfile:
31             reader = csv.reader(csvfile, delimiter=',')
32             for row in reader:
33                 self.x.append(float(row[0].replace(',', '.')))
34                 self.y.append(float(row[1].replace(',', '.')))
35
```

```
1 class Device():
2     def __init__(self, storage, ram, cpu):
3         self.storage = storage
4         self.ram = ram
5         self.cpu = cpu
6
7     def showConfig(self):
8         print("Storage: ", self.storage)
9         print("Ram: ", self.ram)
10        print("Cpu: ", self.cpu)
11
12 class Phone(Device):
13     def __init__(self, storage, ram, cpu, screen):
14         super().__init__(storage, ram, cpu)
15         self.screen = screen
16
17     def doACall(self):
18         print("Calling...")
19
20
21
22 class Computer(Device):
23     def __init__(self, storage, ram, cpu, keyboard):
24         super().__init__(storage, ram, cpu)
25         self.keyboard = keyboard
26
27     def type(self):
28         print("Typing...")

```