

```
int main() {
    DataReader dataReader("pokemons.txt");
```

[main.cpp]

```
Abra / 2'11" / 43 lbs / psychic / Arbok, Charmander
Pikachu / 1'4" / 10 lbs / electoric / Para, Clefairy
Arbok / 11'6" / 143 lbs / poison / Butterfree, Charmander
Bulbasaur / 2'4" / 15 lbs / grass / Clefairy, Pikachu
Butterfree / 3'7" / 70 lbs / bug / Pikachu, Arbok, Charmander
Charmander / 2'0" / 19 lbs / fire / Butterfree, Squirtle
Squirtle / 1'8" / 20 lbs / water / Diglett, Abra
Diglett / 8" / 1.8 lbs / ground / Abra, Caterpie, Pikachu
Caterpie / 1'0" / 6.4 lbs / bug / Butterfree, Charmander, Abra, Caterpie, Pikachu
Clefairy / 2'0" / 200 lbs / fairy / Caterpie, Pikachu, Diglett, Clefairy
Para / 1'0" / 100 lbs / bug / Clefairy, Pikachu, Abra, Para, Charmander
Poliwag / 2'0" / 27 lbs / water / Charmander
Psyduck / 2'7" / 43 lbs / water / Abra, Caterpie, Butterfree, Diglett
```

```
void DataReader::separateCategories(std::string& line) {
    std::string temp = "";
    int index = 0;

    filterName(line, index);
    filterHeight(line, index);
    filterWeight(line, index);
    filterType(line, index);
    filterFriend(line, index);
}
```

```
void DataReader::readFile(std::string inputFile) {
    std::string line = "";
    std::ifstream file(inputFile);
    if(file.is_open()) {
        while(getline(file, line)) {
            if(line.size() > 1 && line[0] != '/' && line[1] != '/'){
                separateCategories(line);
            }
        }
        file.close();
    }
}
```

```
private:
    std::vector<std::string> names;
    std::vector<std::string> heights;
    std::vector<std::string> weights;
    std::vector<std::string> types;
    std::vector< std::vector<std::string> > friendsVectors;
```

[ dataReader.hpp]

```
PokeDex myDex(dataReader.getNames(),
              dataReader.getHeights(),
              dataReader.getWeights(),
              dataReader.getTypes(),
              dataReader.getFriends());
Pokemon pikachu = myDex.getPokemonOf(1);
```

[main.cpp]

```
PokeDex::PokeDex(std::vector<std::string> inputNames,
                 std::vector<std::string> inputHeights,
                 std::vector<std::string> inputWeights,
                 std::vector<std::string> inputTypes,
                 std::vector< std::vector<std::string> > inputFriendsVectors) {
    names = inputNames;
    heights = inputHeights;
    weights = inputWeights;
    types = inputTypes;
    friendsVectors = inputFriendsVectors;
}
```

[pokeDex.cpp]

```
Pokemon pikachu = myDex.getPokemonOf(1);
```

[main.cpp]

```
Pokemon PokeDex::getPokemonOf(int inputNumber) {
    Pokemon tempPokemon(names[inputNumber],
                        heights[inputNumber],
                        weights[inputNumber],
                        types[inputNumber],
                        friendsVectors[inputNumber]);

    return tempPokemon;
}
```

[pokeDex.cpp]

```
Pokemon::Pokemon(std::string name,
                 std::string height,
                 std::string weight,
                 std::string type,
                 std::vector<std::string> friends) {
    this -> name = name;
    this -> height = height;
    this -> weight = weight;
    this -> type = type;
    this -> friends = friends;
}
```

[pokemon.cpp]

```
pikachu.info();
```

[main.cpp]

```
void Pokemon::info() {
    std::cout << "-----" << name << correction20f(name) << std::endl;
    std::cout << "| Height : " << height << correction10f(height) << " |" << std::endl;
    std::cout << "| Weight : " << weight << correction10f(weight) << " |" << std::endl;
    std::cout << "| Type : " << type << correction10f(type) << " |" << std::endl;
    std::cout << "| Friends : " << friends.size() << correction10f("1") << " |" << std::endl;
    std::cout << "-----" << std::endl;
}
```

[pokemon.cpp]

```
-----Pikachu-----
```

```
| Height : 1'4" |
| Weight : 10 lbs |
| Type : electoric |
| Friends : 2 |
-----
```