```java
package taxpayer;

import java.util.ArrayList;

public abstract class Taxpayer {
    private String name = "nobody";
    private int afm = 0;
    private String familyStatus = "none";
    private float income = 0;
    private ArrayList<Receipt> receipts = new ArrayList<Receipt>();
    private String taxpayerInformationString = "";

    public abstract double getBasicTax();

    public int getTotalReceiptsGathered(){
        return receipts.size();
    }

    public int getCategoryNumberOfReceipts(String receiptCategory){
        int categoryNumberOfReceipts = 0;
        for(int i=0; i<receipts.size(); i++){
            if(receipts.get(i).getCategory().equals(receiptCategory)){
                categoryNumberOfReceipts += 1;
            }
        }
        return categoryNumberOfReceipts;
    }

    public double getCategoryReceiptAmountPaid(String receiptCategory){
        double categoryReceiptAmountPaid = 0;
        for(int i=0; i<receipts.size(); i++){
            if(receipts.get(i).getCategory().equals(receiptCategory)){
                categoryReceiptAmountPaid += receipts.get(i).getAmountPaid();
            }
        }
        return categoryReceiptAmountPaid;
    }

    public double getTaxIncrease(){
        double receiptTotalAmountPaid = this.getReceiptTotalAmountPaid();
        if(receiptTotalAmountPaid >= 0*income/100 && receiptTotalAmountPaid <
20*income/100){
            return 8*income / 100;
        }
        else if(receiptTotalAmountPaid >= 20*income/100 && receiptTotalAmountPaid <
40*income/100){
            return 4*income / 100;
        }
        else if(receiptTotalAmountPaid >= 40*income/100 && receiptTotalAmountPaid <
60*income/100){
            return (-1)*15*income / 100;
        }
        else if(receiptTotalAmountPaid >= 60*income/100){
            return (-1)*30*income / 100;
        }
        else{
            System.out.println("Something went wrong calculating tax increase!");
            return -1;
        }
    }

    private double getReceiptTotalAmountPaid(){
        double receiptTotalAmountPaid = 0;
        for(int i=0; i<receipts.size(); i++){
```

```
63              receiptTotalAmountPaid += receipts.get(i).getAmountPaid();
64          }
65          return receiptTotalAmountPaid;
66      }
67
68      public double getTotalTax(){
69          double basicTax = this.getBasicTax();
70          double taxIncrease = this.getTaxIncrease();
71          return basicTax + taxIncrease;
72      }
73
74      public ArrayList<Receipt> getReceipts(){
75          return receipts;
76      }
77
78      public void setReceipts(ArrayList<Receipt> receipts){
79          this.receipts = receipts;
80      }
81
82      public Taxpayer getInitializedTaxpayer(ArrayList<String> myList){
83          initializeTaxpayer(myList);
84          return this;
85      }
86
87      public void initializeTaxpayer(ArrayList<String> myList){
88          name = myList.get(0);
89          myList.remove(0);
90          afm = Integer.parseInt(myList.get(0));
91          myList.remove(0);
92          familyStatus = myList.get(0);
93          myList.remove(0);
94          income = Float.parseFloat(myList.get(0));
95          myList.remove(0);
96          int i = 0;
97          while(i<myList.size()){
98              ArrayList<String> receiptDataList = new ArrayList<String>();
99              Receipt newReceipt = new Receipt();
100             for(int j=i; j<i+9; j++){
101                 receiptDataList.add(myList.get(j));
102             }
103             newReceipt.initializeReceipt(receiptDataList);
104             receipts.add(newReceipt);
105             i=i+9;
106         }
107     }
108
109     public void createTaxpayerInformationString(){
110         taxpayerInformationString = " name : " + name + " afm : " + afm + " family
    status : "
111                 + familyStatus + " income : " + income + "/n";
112         for(int i=0; i<receipts.size(); i++){
113             taxpayerInformationString += " receipt code: " +
    receipts.get(i).getReceiptCode();
114             taxpayerInformationString += " date of issue: " +
    receipts.get(i).getDateOfIssue();
115             taxpayerInformationString += " category: " +
    receipts.get(i).getCategory();
116             taxpayerInformationString += " amount paid: " +
    receipts.get(i).getAmountPaid();
117             taxpayerInformationString += " company name: " +
    receipts.get(i).getSeller().getCompanyName();
118             taxpayerInformationString += " country: " +
    receipts.get(i).getSeller().getCountry();
119             taxpayerInformationString += " city: " +
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   receipts.get(i).getSeller().getCity();
120             taxpayerInformationString += " street: " +
   receipts.get(i).getSeller().getStreet();
121             taxpayerInformationString += " street number: " +
   receipts.get(i).getSeller().getStreetNumber();
122         }
123     }
124
125     public String getFamilyStatus(){
126         return familyStatus;
127     }
128
129     public void setFamilyStatus(String familyStatus){
130         this.familyStatus = familyStatus;
131     }
132
133     public float getIncome(){
134         return income;
135     }
136
137     public void setIncome(float income){
138         this.income = income;
139     }
140
141     public String getName(){
142         return name;
143     }
144
145     public void setName(String name){
146         this.name = name;
147     }
148
149     public int getAfm(){
150         return afm;
151     }
152
153     public void setAfm(int afm){
154         this.afm = afm;
155     }
156
157     public String getTaxpayerInformationString(){
158         return taxpayerInformationString;
159     }
160 }
```