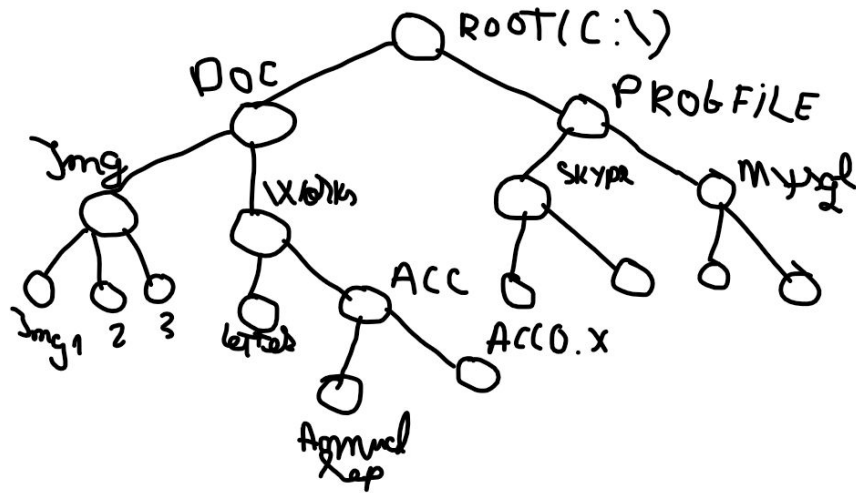


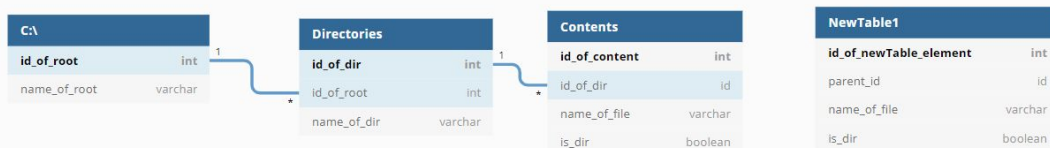
```

C:\
  Documents
    Images
      Image1.jpg
      Image2.jpg
      Image3.png
    Works
      Letter.doc
      Accountant
        Accounting.xls
        AnnualReport.xls
  Program Files
    Skype
      Skype.exe
      Readme.txt
  Mysql
    Mysql.exe
    Mysql.com
  
```

I can see it like a tree:

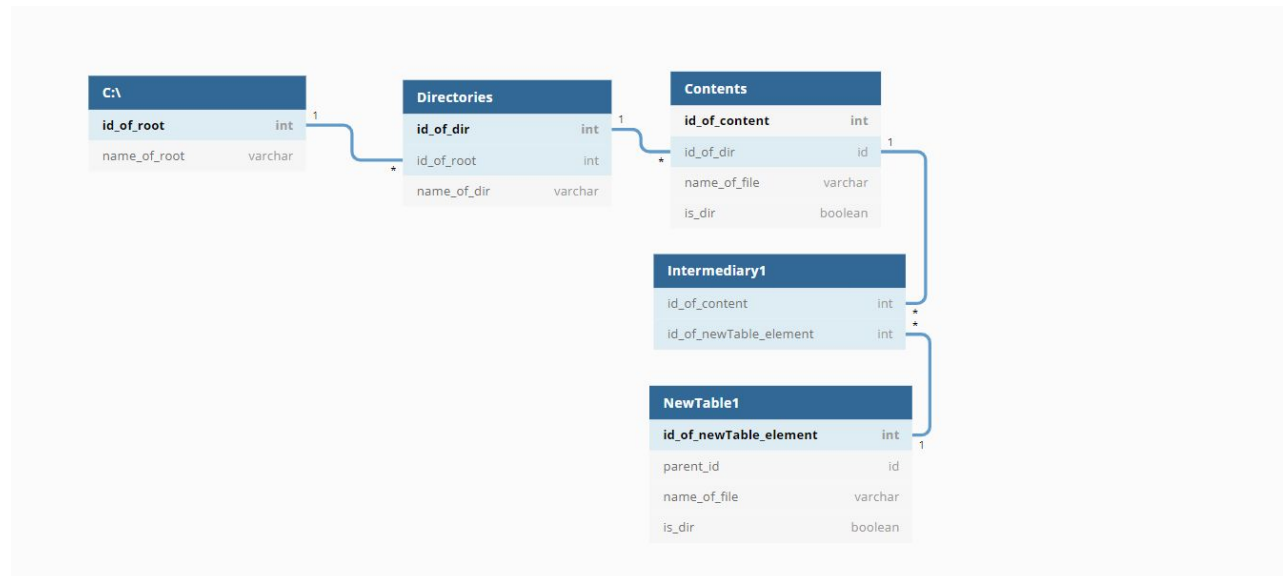


Q1.Database Design implementation:



My idea is that whenever we find an element from components to be a dir, we will set the is_dir boolean field to True, and then we will create a new table(NewTable1) for that table that contains the dir element with the relation one-to-many. But, since every element from

contents can be a dir and for each dir we would have many children available, there is a many-by-many relation, that will be broken down to 2 one-by-many relationships using an intermediary database:



Q2.Input from text file

In order to insert the data into the database I used a method involving the Markup Language for the inputFile.txt:

```

inputFile.txt - Notepad
File Edit Format View Help
<Red>Documents
  <Red>Images
    <Blue>Image1.jpg</Blue>
    <Blue>Image1.jpg</Blue>
    <Blue>Image1.jpg</Blue>
  </Red>
  <Red>Works
    <Blue>Letter.doc</Blue>
  <Red>Accountant
    <Blue>Accounting.xls</Blue>
    <Blue>AnnualReport.xls</Blue>
  </Red>
</Red>

<Red>Program Files
  <Red>Skype
    <Blue>Skype.exe</Blue>
    <Blue>Readme.txt</Blue>
  </Red>
  <Red> Mysql
    <Blue>Mysql.exe</Blue>
    <Blue>Mysql.com</Blue>
  </Red>
</Red>
  
```