



QA Automation Engineer position exam.

You can answer the following questions with one of the following languages: Java or Python.

At the end please archive/zip the questions under the name QAE.rar/QAE.zip

and place each question under a different subfolder within the archive, for example – question1, question2

**Question1:**

Given a folder in the file system which contains the json that you received. Please remove the following keys from the json: “filename”, “type” so your json object should look like this:

```
{  
  "groupId": "com.google.guava",  
  "artifactId": "guava",  
  "version": "19.0",  
  "sha1": "6ce200f6b23222af3d8abb6b6459e6c44f4bb0e9",  
  "children": []  
}
```

**Question2:**

As you can see each object in the json might contain additional sub json objects. In this question, you are required to change this hierarchy and create a flat json.

For example, our json looks like this:

```
{
  "groupId": "com.github.rholder",
  "artifactId": "guava-retrying",
  "version": "2.0.0",
  "type": "jar",
  "sha1": "974bc0a04a11cc4806f7c20a34703bd23c34e7f4",
  "children": [
    {
      "groupId": "com.google.guava",
      "artifactId": "guava",
      "version": "19.0",
      "type": "jar",
      "sha1": "6ce200f6b23222af3d8abb6b6459e6c44f4bb0e9",
      "children": [],
      "filename": "guava-19.0.jar"
    },
    {
      "groupId": "com.google.code.findbugs",
      "artifactId": "jsr305",
      "version": "2.0.2",
      "type": "jar",
      "sha1": "516c03b21d50a644d538de0f0369c620989cd8f0",
      "children": [],
      "filename": "jsr305-2.0.2.jar"
    }
  ],
  "filename": "guava-retrying-2.0.0.jar"
},
```

As you can see the first object contains 2 additional objects.

Please change it as the following:

Given that the hierarchy level is unknown (n)

```
{
  "groupId": "com.github.rholder",
  "artifactId": "guava-retrying",
  "version": "2.0.0",
  "type": "jar",
  "sha1": "974bc0a04a11cc4806f7c20a34703bd23c34e7f4",
  "filename": "guava-retrying-2.0.0.jar"
},
{
  "groupId": "com.google.guava",
  "artifactId": "guava",
  "version": "19.0",
  "type": "jar",
  "sha1": "6ce200f6b23222af3d8abb6b6459e6c44f4bb0e9",
  "children": [],
  "filename": "guava-19.0.jar"
},
{
  "groupId": "com.google.code.findbugs",
  "artifactId": "jsr305",
  "version": "2.0.2",
  "type": "jar",
  "sha1": "516c03b21d50a644d538de0f0369c620989cd8f0",
  "children": [],
  "filename": "jsr305-2.0.2.jar"
}
```