

```
//////////ordenação\\\\\\\\\\\\\\\\\\\\
```

```
List<String[]> resulBuble = new ArrayList<>();
```

```
public void Execute() throws IOException, SQLException{
```

```
List<Integer> listaCod = new ArrayList();
```

```
List<String> listaDesc = new ArrayList();
```

```
List<String> listaCateg = new ArrayList();
```

```
FileWriter arquivo = new FileWriter("C:/temp/produto.json");
```

```
PrintWriter copArquivo = new PrintWriter(arquivo);
```

```
ResultSet executeQuery = dataSource.getConnection()
```

```
.createStatement().executeQuery("SELECT codigo, descricao, categoria FROM  
produto");
```

```
while( executeQuery.next()){
```

```
    listaCod.add(executeQuery.getInt("codigo"));
```

```
    listaDesc.add(executeQuery.getString("descricao"));
```

```
    listaCateg.add(executeQuery.getString("categoria"));
```

```
}
```

```
int codigo[];
```

```
String descricao[];
```

```
String categoria[];
```

```
codigo = new int [listaCod.size()]; // crio um vetor com o tamanho da lista
```

```
descricao = new String [listaDesc.size()];
```

```
categoria = new String [listaCateg.size()];
```

```
for(int i = 0; i < listaCod.size(); i++){
```

```

codigo[i] = listaCod.get(i);
descricao[i] = listaDesc.get(i);
categoria[i] = listaCateg.get(i);
}

```

```

//////////Insertion Sort\\\\\\\\\\\\\\\\\\\\

```

```

for (int i = 0; i < codigo.length; i++) {
    int auxCod = codigo[i];
    String auxDesc = descricao[i];
    String auxCat = categoria[i];

    int j = i - 1;
    while (j >= 0 && codigo[j] >= auxCod) {
        codigo[j + 1] = codigo[j];
        descricao[j + 1] = descricao[j];
        categoria[j + 1] = categoria[j];

        j--;
    }
    codigo[j + 1] = auxCod;
    descricao[j + 1] = auxDesc;
    categoria[j + 1] = auxCat;
}

```

```

//////////\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\

```

```

for(int i =0; i < codigo.length; i++){
    resulBuble.add(new String[]{Integer.toString(codigo[i]), descricao[i], categoria[i]});
}

```

```

/////conversão Json\\\\\\\\

```

```
    ObjectMapper conversor = new ObjectMapper();  
    String str = conversor.writeValueAsString(resulBuble);  
  
    copArquivo.print(str);  
    arquivo.close();  
    System.out.println(str);  
}
```