US301 – Análise de Complexidade

```
public void importUserCSV(String path) throws IOException {
   String line;
   String[] metadata;

   BufferedReader br = Files.newBufferedReader(Path.of(path));
   br.readLine();
   line = br.readLine();
   while (line != null) {
      metadata = line.split(Constants.CSV_SPLIT_REGEX);
      addUser(metadata[Constants.User.LOC_ID.ordinal()],
          metadata[Constants.User.USER_ID.ordinal()],
          Double.parseDouble(metadata[Constants.User.LAT.ordinal()]),
          Double.parseDouble(metadata[Constants.User.LNG.ordinal()]));
      line = br.readLine();
   }
}
```

```
public void importDistanceCSV(String path) throws IOException {
   String line;
   String[] metadata;

   BufferedReader br = Files.newBufferedReader(Path.of(path));
   //skip header
   br.readLine();
   line = br.readLine();
   while (line != null) {
      metadata = line.split(Constants.CSV_SPLIT_REGEX);
      addPath(metadata[Constants.Distance.LOC_ID_1.ordinal()],
          metadata[Constants.Distance.LOC_ID_2.ordinal()],
          Integer.parseInt(metadata[Constants.Distance.LENGTH.ordinal()]));
      line = br.readLine();
   }
}
```

Linha	Código	Complexidade
1-4	String line**;** String[] metadata**;** BufferedReader br = Files.*newBufferedReader*(Path.*of*(path))**;** br.readLine()**;**	1
5	while (line != null) {	n
6	metadata[Constants.User.*USER_ID*.ordinal()]**,** Double.*parseDouble*(metadata[Constants.User.*LAT*.ordinal()])**,** Double.*parseDouble*(metadata[Constants.User.*LNG*.ordinal()]))**;**	n
7	line = br.readLine()**;**	n
8	}	

Ambos os métodos têm **O(n)** complexidade, onde n é o número de linhas do ficheiro recebido por parâmetro.