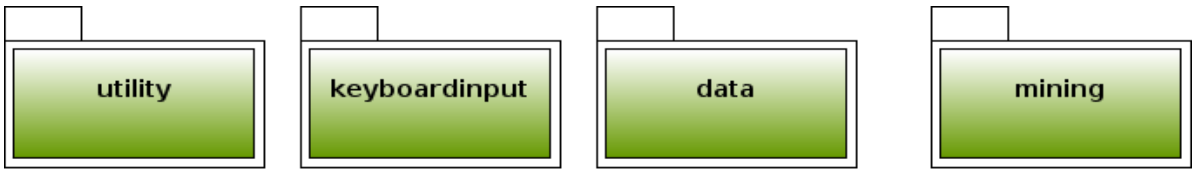
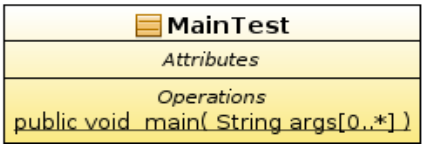
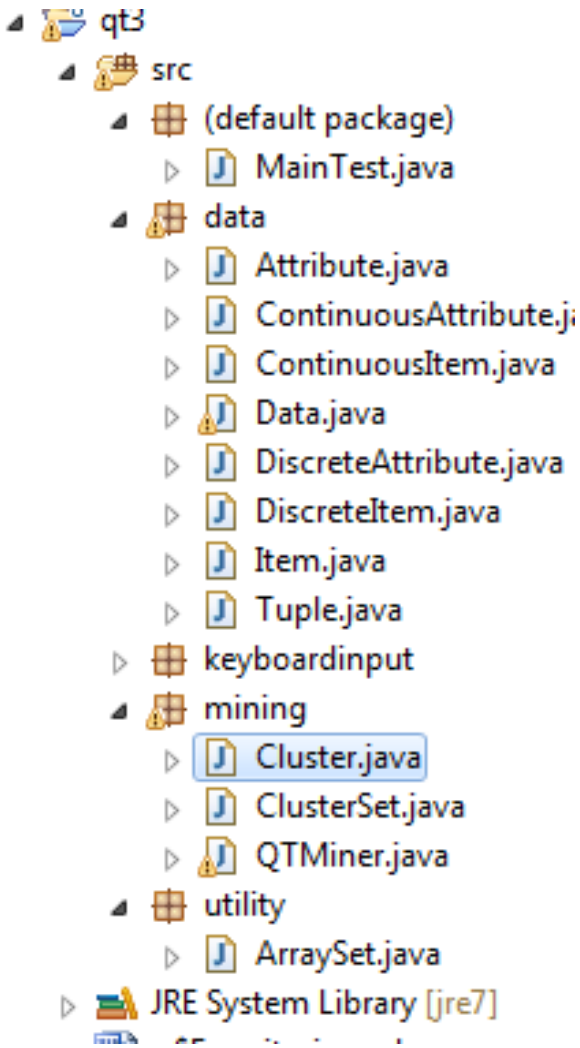
Esercitazione 3 – Package Eserc, ed Eccezioni.





Definire i package utility, keyboardinput,data e mining spostare le classi nel package di appartenenza secondo lo schema riportato di segue. Ove necessario, modificare ***appropriatamente*** *anche i qualificatori di visibilità.*



■ *Aggiungere la classe Keyboard (fornita dal docente) che colleziona i metodi di classe per l'acquisizione dell'input da tastiera*

■ *Modificare MainTest in modo da stabilire una interazione con l'utente per acquisire da tastiera il numero reale radius che rappresenta il raggio dei cluster da scoprire e dare la possibilità all'utente di decidere di ripetere l'esecuzione di QT anche con valori di radius differenti.*

Esempi di output:

```
0:sunny,hot,high,weak,no
1:sunny,hot,high,strong,no
2:overcast,hot,high,weak,yes
3:rain,mild,high,weak,yes
4:rain,cool,normal,weak,yes
5:rain,cool,normal,strong,no
6:overcast,cool,normal,strong,yes
7:sunny,mild,high,weak,no
8:sunny,cool,normal,weak,yes
9:rain,mild,normal,weak,yes
10:sunny,mild,normal,strong,yes
11:overcast,mild,high,strong,yes
12:overcast,hot,normal,weak,yes
13:rain,mild,high,strong,no

Insert radius (>0)=
1
Number of clusters:9
0:Centroid=(sunny hot high weak no )
Examples:
[sunny hot high weak no ] dist=0.0
[sunny hot high strong no ] dist=1.0
[sunny mild high weak no ] dist=1.0

AvgDistance=0.6666666666666666
1:Centroid=(rain cool normal weak yes )
Examples:
[rain cool normal weak yes ] dist=0.0
[sunny cool normal weak yes ] dist=1.0
[rain mild normal weak yes ] dist=1.0

AvgDistance=0.6666666666666666
2:Centroid=(overcast hot high weak yes )
Examples:
[overcast hot high weak yes ] dist=0.0
[overcast hot normal weak yes ] dist=1.0

AvgDistance=0.5
3:Centroid=(rain mild high weak yes )
Examples:
```

```
[rain mild high weak yes ] dist=0.0

AvgDistance=0.0
4:Centroid=(rain cool normal strong no )
Examples:
[rain cool normal strong no ] dist=0.0

AvgDistance=0.0
5:Centroid=(overcast cool normal strong yes )
Examples:
[overcast cool normal strong yes ] dist=0.0

AvgDistance=0.0
6:Centroid=(sunny mild normal strong yes )
Examples:
[sunny mild normal strong yes ] dist=0.0

AvgDistance=0.0
7:Centroid=(overcast mild high strong yes )
Examples:
[overcast mild high strong yes ] dist=0.0

AvgDistance=0.0
8:Centroid=(rain mild high strong no )
Examples:
[rain mild high strong no ] dist=0.0

AvgDistance=0.0

New execution?(y/n)
y
Insert radius (>0)=
4
14 tuples in one cluster!
New execution?(y/n)
y
Insert radius (>0)=
2
Number of clusters:3
0:Centroid=(rain mild high weak yes )
Examples:
[overcast hot high weak yes ] dist=2.0
[rain mild high weak yes ] dist=0.0
[rain cool normal weak yes ] dist=2.0
[sunny mild high weak no ] dist=2.0
[rain mild normal weak yes ] dist=1.0
[overcast mild high strong yes ] dist=2.0
[rain mild high strong no ] dist=2.0

AvgDistance=1.5714285714285714
1:Centroid=(overcast cool normal strong yes )
Examples:
[rain cool normal strong no ] dist=2.0
[overcast cool normal strong yes ] dist=0.0
[sunny cool normal weak yes ] dist=2.0
[sunny mild normal strong yes ] dist=2.0
[overcast hot normal weak yes ] dist=2.0

AvgDistance=1.6
2:Centroid=(sunny hot high weak no )
Examples:
```

```
[sunny hot high weak no ] dist=0.0
[sunny hot high strong no ] dist=1.0

AvgDistance=0.5

New execution?(y/n)
n
```