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CS-49J
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.getCharacterSetMethod() - This is the result of printing the set that comes from the .getCharacterSetMethod().

```
Name: Bagon      HP: 45    Legendary: false
Name: Servine    HP: 60    Legendary: false
Name: Arceus     HP: 120   Legendary: true
Name: Mawile     HP: 50    Legendary: false
Name: Castform   HP: 70    Legendary: false
Name: Unfezant    HP: 80    Legendary: false
Name: Samurott   HP: 95    Legendary: false
Name: Spritzee   HP: 70    Legendary: false
Name: Tapu Fini   HP: 70    Legendary: true
Name: Ekans      HP: 35    Legendary: false
Name: Lunatone   HP: 90    Legendary: false
Name: Poliwhag   HP: 40    Legendary: false
Name: Gourgeist  HP: 85    Legendary: false
Name: Furfrou    HP: 75    Legendary: false
Name: Darkrai    HP: 70    Legendary: true
Name: Vaporeon   HP: 130   Legendary: false
Name: Tapu Bulu  HP: 70    Legendary: true
Name: Yanma      HP: 65    Legendary: false
Name: Camerupt   HP: 70    Legendary: false
Name: Latios     HP: 80    Legendary: true
Name: Gible      HP: 58    Legendary: false
Name: Seaking    HP: 80    Legendary: false
Name: Spinarak   HP: 40    Legendary: false
Name: Scizor     HP: 70    Legendary: false
Name: Minun      HP: 60    Legendary: false
Name: Charmander HP: 39    Legendary: false
Name: Landorus   HP: 89    Legendary: true
Name: Gothitelle HP: 70    Legendary: false
Name: Glaceon    HP: 65    Legendary: false
Name: Klang      HP: 60    Legendary: false
Name: Crabominable HP: 97    Legendary: false
```

```
Name: Exeggcute  HP: 60    Legendary: false
Name: Honchkrow  HP: 100   Legendary: false
Name: Helioptile HP: 62    Legendary: false
Name: Krookodile HP: 95    Legendary: false
Name: Poochyena  HP: 35    Legendary: false
Name: Baltoy     HP: 40    Legendary: false
Name: Igglybuff  HP: 90    Legendary: false
Name: Garbodor   HP: 80    Legendary: false
Name: Aegislash  HP: 60    Legendary: false
Name: Electrode  HP: 60    Legendary: false
Name: Wailord    HP: 170   Legendary: false
Name: Cubchoo    HP: 55    Legendary: false
Name: Lillipup   HP: 45    Legendary: false
Name: Rhydon     HP: 105   Legendary: false
Name: Togekiss   HP: 85    Legendary: false
Name: Zoroark    HP: 60    Legendary: false
Name: Amaura     HP: 77    Legendary: false
Name: Klefki     HP: 57    Legendary: false
Name: Trapinch   HP: 45    Legendary: false
Name: Magmortar  HP: 75    Legendary: false
Name: Zebstrika  HP: 75    Legendary: false
Name: Kadabra    HP: 40    Legendary: false
Name: Charjabug  HP: 57    Legendary: false
Name: Yungoos    HP: 48    Legendary: false
Name: Venomoth   HP: 70    Legendary: false
801
carlosquiroz@LosMac PokemonProj %
```

```
HashSet<Character> characterSet = reader.getCharacterSet();

int index = 0;
for(Character c : characterSet) {
    c.info();
    index++;
}
System.out.println(index);
```

```
public static int getIsLegendaryCount()
```

```
public static int getIsLegendaryCount(HashSet<Character> baseSet) {  
    int legendCount = 0;  
  
    for(Character pkMon : baseSet) {  
        if(pkMon.getLegendary())  
            legendCount++;  
    }  
    return legendCount;  
}
```

OUTPUT:

```
carlosquiroz@LosMac PokemonProj % javac -d bin/*.java  
zsh: no matches found: bin/*.java  
carlosquiroz@LosMac PokemonProj % javac -d bin src/*.java  
carlosquiroz@LosMac PokemonProj % java -cp bin Pokemon  
Number of Legendary Pokemon: 70  
carlosquiroz@LosMac PokemonProj %
```

```
public static TreeSet<Character> getCharacterByFirstLetter()
```

```
public static TreeSet<Character> getCharacterByFirstLetter(char firstLetter, HashSet<Character> baseSet) {  
    TreeSet<Character> nameSet = new TreeSet<>();  
  
    for(Character pkMon : baseSet) {  
        if(pkMon.getName().charAt(0) == firstLetter)  
            nameSet.add(pkMon);  
    }  
    return nameSet;  
}
```

OUTPUT:

Name: Abomasnow	HP: 90	Legendary: false	Name: Archen	HP: 55	Legendary: false
Name: Abra	HP: 25	Legendary: false	Name: Archeops	HP: 75	Legendary: false
Name: Absol	HP: 65	Legendary: false	Name: Ariados	HP: 70	Legendary: false
Name: Accelgor	HP: 80	Legendary: false	Name: Armaldo	HP: 75	Legendary: false
Name: Aegislash	HP: 60	Legendary: false	Name: Aromatisse	HP: 101	Legendary: false
Name: Aerodactyl	HP: 80	Legendary: false	Name: Aron	HP: 50	Legendary: false
Name: Aggron	HP: 70	Legendary: false	Name: Articuno	HP: 90	Legendary: true
Name: Aipom	HP: 55	Legendary: false	Name: Audino	HP: 103	Legendary: false
Name: Alakazam	HP: 55	Legendary: false	Name: Aurorus	HP: 123	Legendary: false
Name: Alomomola	HP: 165	Legendary: false	Name: Avalugg	HP: 95	Legendary: false
Name: Altaria	HP: 75	Legendary: false	Name: Axew	HP: 46	Legendary: false
Name: Amaura	HP: 77	Legendary: false	Name: Azelf	HP: 75	Legendary: true
Name: Ambipom	HP: 75	Legendary: false	Name: Azumarill	HP: 100	Legendary: false
Name: Amoonguss	HP: 114	Legendary: false	Name: Azurill	HP: 50	Legendary: false
Name: Ampharos	HP: 90	Legendary: false			
Name: Anorith	HP: 45	Legendary: false			
Name: Araquanid	HP: 68	Legendary: false			
Name: Arbok	HP: 60	Legendary: false			
Name: Arcanine	HP: 90	Legendary: false			
Name: Arceus	HP: 120	Legendary: true			

```
carlosquiroz@LosMac PokemonProj %
```

public static HashSet<Character> getHitPointList()-

```
public static HashSet<Character> getHitPointList(int maxHP, HashSet<Character>baseSet) throws Exception {  
    if(maxHP < 0)  
        throw new Exception("Invalid HP. Must be a positive Integer.");  
  
    HashSet<Character> hpSet = new HashSet<>();  
  
    for(Character pkMon : baseSet) {  
        if(pkMon.getHP() <= maxHP)  
            hpSet.add(pkMon);  
    }  
    return hpSet;  
}
```

OUTPUT:

```
carlosquiroz@LosMac PokemonProj % javac -d bin src/*.java  
carlosquiroz@LosMac PokemonProj % java -cp bin Pokemon  
Name: Diglett      HP: 10    Legendary: false  
Name: Magikarp     HP: 20    Legendary: false  
Name: Duskull      HP: 20    Legendary: false  
Name: Shuckle      HP: 20    Legendary: false  
Name: Shedinja     HP: 1     Legendary: false  
Name: Pichu        HP: 20    Legendary: false  
Name: Feebas       HP: 20    Legendary: false  
Name: Mime Jr.     HP: 20    Legendary: false  
carlosquiroz@LosMac PokemonProj %
```