Random Class

- A class to create Random numbers
- Constructor Summary shows the objects of this type can be created
  - E.g. Random r = new Random();
- Method Summary shows that it can generate random values of types:
  - integers, doubles etc.
  - E.g. \texttt{r.nextInt(6)} – Generate a integer numbers between 0 (inclusive) and 6 (exclusive)

Packages and import Statements

- What is a \texttt{package}? 
  - Basically it's a directory that has a collection of related classes
  - E.g. Random Class description contains: \texttt{java.util.Random}
  - Indicating that the Random class code is stored in the directory path \texttt{java/util/} somewhere on your machine
    - "util", or utility package
- In order to use implemented work, need to tell Java compiler where class is located
  - Use \texttt{import} statement
    - import java.util.Random;
    - Another way is to use the asterisk "wildcard character": import java.util.*;
    - Import statement is written outside the class description in a file
Difference between Math & Random

- **Object oriented vs. non-object oriented (procedural)**
  - Math class is an example where all variables/methods are static
    - E.g. Only one copy of constants PI and E

- **Import vs. No Import statement**
  - Random class usage requires an import statement as it is not part of the Java language (java.lang) unlike the Math class.

Example Usage

```java
import java.util.Random;
public class egHasARelation {
    Random r; // instance variable of type Random

    public egHasARelation (){
        r = new Random();
    }

    public int randbet1to100() {
        return r.nextInt(100) + 1;
    }
}
```