**Packages**

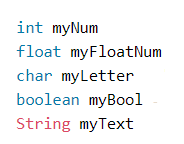
Packages allow us to group work together and recall them

There are four types of Java access modifiers:

1. **Private**: The access level of a private modifier is only within the class. It cannot be accessed from outside the class.
2. **Default**: The access level of a default modifier is only within the package. It cannot be accessed from outside the package. If you do not specify any access level, it will be the default.
3. **Protected**: The access level of a protected modifier is within the package and outside the package through child class. If you do not make the child class, it cannot be accessed from outside the package.
4. **Public**: The access level of a public modifier is everywhere. It can be accessed from within the class, outside the class, within the package and outside the package.

Built in packages are the imports so “import java.array”

**Data Types**



| **Type** | **Representation** | **Range** | **Default Value** |
| --- | --- | --- | --- |
| boolean | N/A | true or false | false |
| byte | 8 bit | -128 to 127 | 0 |
| char | Unicode | \u0000 to \uFFFF | \u0000 |
| short | 16 bit | -32768 to 32767 | 0 |
| int | 32 bit | -2147483648 to 2147483647 | 0 |
| long | 64 bit | -922337206854775808 to 922337206854775807 | 0L |
| float | 32 bit | 3.4e +/- 38(7 digits) | 0.0f |
| double | 64 bit | 1.7e +/- 308(15 digits) | 0.0d |