Today's new class: Class String

- String (char [] input)
- String (char [] input, from, howmany)
- String (String another)
- char charAt (int pos)
- concat (String another)
- endsWith (String suffix)
- indexOf (char c)
- indexOf (char c, int from)
- indexOf (String another)
- indexOf (String another, int from)
- valueOf (int i)
- other value of functions

Replace occurrences of characters, Trimming whitespaces etc.
Interfaces

Specify externally observable member functions
Only the prototype declarations are specified and implementation is not specified and left for implementor class/classes.

```java
interface Collection {
    public Object fetch();
    public Object add(Object o);
}

class Stack implements Collection {
    ...
    public Object fetch () {...}
    public Object add (Object o) {...}
}
```
Inheritance

Mechanism for

Pure Extension
C1={f,g,h}
C2=C1+{p,q}

Variant Behavior
C1={f,g,h}
C2=C1 with f’ to be treated as f, rest of c1 as it is

Polymorphism
Use instances of C2 where instances of C1 are required
Pure Extension

Generalization

Is Extension of

Specialization
Variant Behavior

Is a variation of Generalization

Generalization

Is a variation of Specialization

Specialization
Essence of Polymorphism

Any code that uses the generalization can work with any specialization.

Generalization

3 Specializations
An Example of Inheritance Hierarchy of objects in a graphical drawing tool