

## Format CLASS SPECIFICATIONS

These classes are not part of Java but are available through the library named `apcslib`. You must have the file `apcslib.jar` in the appropriate directory where Java can access it. To have these classes available in your program, use this command:

```
import apcslib.*;
```

Other features of `apcslib` will be covered in later lessons.

```
Format

<<constructors>>
...
<<accessors>>
    public static String center(double d,
                                int fWidth,
                                int dPlaces)
    public static String center(long l, int fWidth)
    public static String center(String s, int fWidth)
    public static String left(double d,
                            int fWidth,
                            int dPlaces)
    public static String left(long l, int fWidth)
    public static String left(String s, int fWidth)
    public static String right(double d,
                            int fWidth,
                            int dPlaces)
    public static String right(long l, int fWidth)
    public static String right(String s, int fWidth)

<<modifiers>>
...

```

### Accessor Methods

```
public static String center(double d, int fWidth, int dPlaces)
```

*postcondition*

returns a String representing the `double` `d` centered in a field of `fWidth` rounded to `dPlaces`.

```
public static String center(long l, int fWidth)
```

*postcondition*

returns a String representing the `long` `l` centered in a field of `fWidth`.

## Format CLASS SPECIFICATIONS

**public static** String center(**String** s, **int** fWidth)

*postcondition*

returns a String representing the String s centered in a field of fWidth.

**public static** String left(**double** d, **int** fWidth, **int** dPlaces)

*postcondition*

returns a String representing the **double** d adjusted to the left in a field of fWidth rounded to dPlaces.

**public static** String left **long** l, **int** fWidth)

*postcondition*

returns a String representing the **long** l adjusted to the left in a field of fWidth.

**public static** String left(**String** s, **int** fWidth)

*postcondition*

returns a String representing the String s adjusted to the left in a field of fWidth.

**public static** String right(**double** d, **int** fWidth, **int** dPlaces)

*postcondition*

returns a String representing the **double** d adjusted to the right in a field of fWidth rounded to dPlaces.

**public static** String right(**long** l, **int** fWidth)

*postcondition*

returns a String representing the **long** l adjusted to the right in a field of fWidth.

**public static** String right(**String** s, **int** fWidth)

*postcondition*

returns a String representing the String s adjusted to the right in a field of fWidth.