

## ISTA 350 Watchlist insert Worksheet      Name:

Code up the insert methods:

```
class WatchListLinked:
```

`init`: This magic method takes a filename that defaults to the empty string. Initialize an instance variable called `root` to a node that has 5 children. The `datum` in the node should be the `None` object (let your default arg do the work, don't pass it in). The data in the 5 children are the 5 denomination strings (i.e. '5', '10', etc.), respectively. The children have no children of their own. If a filename was passed in, each line of the file will represent a bill that we want to add to our watch list tree and will be in the format '`<serial_number> <denomination>\n`'. Look at one of the bill files in a text editor to see specific examples. Insert each of the bills into the watch list. Finally, an instance variable called `validator` holds a compiled regular expression that will be used to check for valid serial numbers (use the same regex as you did in hw1).

`insert`: This instance method takes a string representing a serial number and a string representing a denomination. Insert the bill into the watch list. We will do this one in class, but it may not be posted. If you miss that class and you can't figure it out yourself, you will need to get it from another student.

```
class WatchListDict:
```

`init`: This magic method takes a filename that defaults to the empty string. Initialize an instance variable called `root` to a dictionary that maps each of the 5 denomination strings (i.e. '5', '10', etc.) to an empty dictionary. If a filename was passed in, each line of the file will represent a bill that we want to add to our watch list dictionary and will be in the format '`<serial_number><denomination>\n`'. Look at one of the bill files in a text editor to see specific examples. Insert each of the bills into the watch list. Finally, an instance variable called `validator` holds a compiled regular expression that will be used to check for valid serial numbers (use the same regex as you did in `hw1`).

`insert`: This instance method takes a string representing a serial number and a string representing a denomination. Insert the bill into the watch list. We will do this one in class, but it will not be posted. If you miss that class and you can't figure it out yourself, you may need to get it from another student.