

In this programming assignment, you are defining and implementing a class to hold a single baseball player's data/stats.

You are to develop a program to define and test an object class whose instances will be used to store some batting data for a baseball player. We use this information to compute some statistics about our baseball players. Each baseball player will have the following data:

firstname lastname plateappearances atbats singles doubles triples homeruns walks hitbypitch

The 8 statistics are integers and must be stored an array or arraylist within a Player object. Your class needs to provide all the methods needed to:

- provide a default constructor for your Player class
 - default first and last name are "unknown"
 - Allocate storage for your stats array (new)
- read a player's data from a single String (pass the string into the method)
- Get methods for any data the test driver program might need to write to an output stream, such as the screen or an output file.
- Compute the Player's Batting Average and OPS values. (see below for formulas)
- Any other methods you need to solve the problem.

SUMMARY OF OPERATION

- Prompt the user for the input file name. DO NOT hardcode file names into your program.
- Open input file.
- Read each player line, use a scanner attached to the file to get the next line (String)
 - Create a new Player object to store the data found in the line
 - Pass the String to that player for it to extract the values
- Keep track of the number of players your program reads in!
- Write each player from the input file to the screen in the same report format as Program 06-1

OPTIONAL CHALLENGE

Use exception handling to detect bad (non-numeric) data in the stats lines. Have your logic skip any line with bad values in it. Perhaps write a message to the report indicating the stats could not be computed for this player.

COMPUTING STATS:

See Program 06-1 For formulas.

SAMPLE EXECUTION

Below is a screen capture of what the program would look like when I tested it with the sample input file given below.

```
Welcome to the player statistics calculator test program.
```

```
Enter the name of your input file:  playerinput.txt
```

```
Players found in file:
```

```
      PLAYER NAME      :      AVERAGE      OPS
-----
      Aaron, Hank :      0.305      0.928
      Jones, Chipper :      0.303      0.930
      Cobb, Ty :      0.366      0.934
      Bench, Jonny :      0.267      0.817
      Gwynn, Tony :      0.338      0.810
      Smoltz, John :      0.159      0.406
```

```
End of Program.
```

A SAMPLE INPUT FILE

Hank Aaron	13941	12364	2294	624	98	755	1402	32
Chipper Jones	10614	8984	1671	549	38	468	1512	18
Ty Cobb	13099	11434	3053	724	295	117	1249	94
Jonny Bench	8674	7658	1254	381	24	389	891	19
Tony Gwynn	10232	9288	2378	543	85	135	434	24
John Smoltz	1167	948	118	26	2	5	79	3