

Computer Programming: Basic I

GameBoard: Module 4 Game Skills 2
Assignment: 4.07

Points: 10
Time: 45 min

Problem Definition: Create a program that will keep track of the batting average and slugging percentage for a baseball team.

Specific Considerations: The table shown below gives statistics for a few of the star players on the FVS QB Bandits virtual baseball team.

FVS QB Bandits							
Player	S	D	T	HR	AB	Batting Average	Slugging Percentage
N. Putney	35	17	15	24	245	.371	.857
B. Jordan	32	14	10	20	250	.304	.680
M. Atwill	40	21	5	15	275	.295	.571

You can use these data, or you can follow the links on the web page and use data for professional players. Calculate the batting average and slugging percentage for at least three players using the following equations.

Batting Average = (singles+doubles+triples+homeruns)/times at bat

Slugging Percentage = (singles + 2*doubles + 3*triples + 4*homeruns)/times at bat

The data should be neatly printed in a table format with a title and column headings for Player, Singles, Doubles, Triples, Homeruns, Times At Bat, Batting Average, and Slugging Percentage. You may have to abbreviate the headings in order to make the table fit on the screen. Choose an interesting color combination. Numbers should line up neatly and the batting average and slugging percentage should show three decimal places.

Flowchart: A flowchart is required for this assignment. Save the file as *bandits* (extensions will vary). Remember that the parallelogram is used for both **PRINT** and **READ** in a flowchart; however, there is no symbol for **DATA**, so don't include any data.

Check Your Understanding: Make sure you understand how the Order of Operations applies to the two equations. (For example, what would happen if the parentheses were removed?) Remember that there needs to be a one-to-one correspondence between both the number and type of variables in a **READ** statement so that there is a match with items in the **DATA** statement. You may have to fiddle with the format of the **PRINT USING** to get the data to line up correctly in columns and with decimal points in the proper position.

Grading Rubric: This assignment is worth 10 points and will be graded according to the following rubric.

- Required statements used: 2 out of 2 points
- Flowchart used: 2 out of 2 points
- Required material included: 2 out of 2 points
- Program ran properly: 2 out of 2 points
- Proper output: 2 out of 2 points

Submission Instructions: Save the program as *bandits3.bas* and submit the file through the In Box as [Assignment 04.07](#).