**Program 506T**

**(Softball Team)**

**Program Description:**

Read from the data file, the first two elements are strings, the first and the last name. This is following by 12 ints and they are the number of at bats, the number of walks, the number of hit by pitches, the number of sacrifices, the number of hits, the number of singles, the number of doubles, the number of triples, the number of home runs for offense. Then the defensive stats, the number of assists, the number of putouts and then the number of errors.

You are to complete the player, offense and defense classes. The offense class should also keep each player’s average, slugging and on-base percentage. The defensive states should keep the fielding percentage for each player. Complete the Player, Offense and Defense Classes.

The program should report:

A: The player with the most hits.

B: The two players with the highest batting average.

C: The two players with the worst fielding percentage.

D: The team sorted in on base percentage order.

E: The teams slugging percentage.

F: The total number of hits for the team.

G: The player with the fielding percentage that is the closest to the average fielding percentage of the entire team

H: The user of the system should be asked if they want to see 1. The most or 2. The least of A.singles, B.doubles, C. Triples, D. Home runs and the system should print the appropriate player(s)

I: The player with the lowest batting average was traded for

Jordan Guzman 105 4 5 6 27 15 4 4 4 18 19 3

J: Reprint the stats for sections E, F and G with the updated team members

**Statements Required:** input, output, loop control, arrayList, classes

**Data Location: prog506t.txt**

public class Player

{

Private String myname;

Private Offense myoff;

Private Defense mydef;

Public Player(…

{ …

}

Public String getName()

{

}

Public double getbattingavg()

{

}

Public double getonbasepercentage()

{

}

Public double getsluggingpercentage

{

}

Public double getfieldingpercentage()

{

}

12 public ints for each of the offensive and defensive categories

Public class offense

Private int myab;

Private int mybb;

Private int myhp;

Private int mysac;

Private int myhits

Print int my1b;

Print int my2b;

Print int my3b;

Print int myhr;

Private double myavg;

Private double myslug

Private double myonbaseperc;

Public offense(int ab,int bb, int hp,int sac, int hits, int b1, int b2, int b3, int hr)

{

}

Returns for each of the private data

Public class Defense

Private int myassists;

Private int myputouts;

Private int myerrors;

Private double myfieldingpercentage

Public Defense(int a, int p, int e)

{

}

Returns for each of the private data