Project 1: -Moneyball

CSC 250 – ACCELERATED CS I, II

Fall 2021

Due: Sept 29, at 11:59 PM

Problem Part 1-Moneyball. There's a famous movie called *Moneyball* that was made in 2011.

It's based on a true story and, if you like baseball movies, is a must see. Because of what this

manager did, almost all teams now use statistics to help them improve their teams. So, you're going

to write a program that helps the NBA, NFL, and NHL. The program should prompt the user for

number of years to enter data for a particular player. After that, the program should prompt the

user for the player's starting year and then read in the statistics of the player for each of those years.

The program should finish by printing out the best (highest) year and the worst (lowest) year for

the player. Big hint: note that the starting year is year 0. The program should behave like the sample

output below.

Sample Output #1:

Enter the number of years: 5

Enter the starting year: 1999

Enter stat for year 1999: 4

Enter stat for year 2000: 7

Enter stat for year 2001: 8

Enter stat for year 2002: 10

Enter stat for year 2003: 6

Best stat was 10 in year 2002

Worst stat was 4 in year 1999

Sample Output #2:

Enter the number of years: 6

Enter the starting year: 2012

Enter stat for year 2012: 45

Enter stat for year 2013: 36

Enter stat for year 2014: 77

Enter stat for year 2015: 12

Enter stat for year 2016: 50

Enter stat for year 2017: 48

Best stat was 77 in year 2014

Worst stat was 12 in year 2015

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Sample Output #1:
Enter the number of years: 5
Enter the starting year: 1999
Enter stat for year 1999: 4
Enter stat for year 2000: 7
Enter stat for year 2001: 8
Enter stat for year 2002: 10
Enter stat for year 2003: 6
Best stat was 10 in year 2002
Worst stat was 4 in year 1999
Sample Output #2:
Enter the number of years: 6
Enter the starting year: 2012
Enter stat for year 2012: 45
Enter stat for year 2013: 36
Enter stat for year 2014: 77
Enter stat for year 2015: 12
Enter stat for year 2016: 50
Enter stat for year 2017: 48
Best stat was 77 in year 2014
 Worst stat was 12 in year 2015
```

<u>Problem Part 2:</u> Similar to the previous Part 1, you're going to read in the number of years the player played and the starting year of that player - followed by the statistics for those years. This time, however, you're going to print out the years from worst to best in sorted order.

Hint: this will require a second array to store years. If you can sort one array, can you sort both?

Sample Output #1:

Enter the number of years: 5

Enter the starting year: 2003

Enter stat for year 2003: 5

Enter stat for year 2004: 4

Enter stat for year 2005: 7

Enter stat for year 2006: 1

Enter stat for year 2007: 3

2006| 2007| 2004| 2003|2005 |

Sample Output #2:

Enter the number of years: 6

Enter the starting year: 1879

Enter stat for year 1879: 70

Enter stat for year 1880: 89

Enter stat for year 1881: 111

Enter stat for year 1882: 65

Enter stat for year 1883: 105

Enter stat for year 1884: 98

1882|1879 |1880| 1884 |1883 |1881|

sample output

```
Enter number of years:5
Enter starting year:2003
Enter stat for 2003:5
Enter stat for 2004:4
Enter stat for 2005:7
Enter stat for 2006:1
Enter stat for 2007:3
2006|2007|2004|2003|2005|
```

```
Enter number of years:6
Enter starting year:1879
Enter stat for 1879:70
Enter stat for 1880:89
Enter stat for 1881:111
Enter stat for 1882:65
Enter stat for 1883:105
Enter stat for 1884:98
1882|1879|1880|1884|1883|1881|
```