Note: Don't use any built-in function unless otherwise stated

- Write your name and team members name at the top of the program in comments
- Make sure your code is indented properly
- Submit only the .java file at UNM Blackboard learn
- Name your file as YourFirstName.YourLastName.java
- 1. (8 points + 1 point for proper indentation + 1 point for correct output format) Write a program in Java using loop to calculate the sum of following series where n is integer input by user. (Use String.format() function to set the precision upto 2 digit)  $1 + 1/2 + 1/3 + 1/4 + 1/5 + \dots 1/n$

Example: Input: 4
Output: 2.08

2. (8 points + 1 point for proper indentation + 1 point for correct output format) Write a program in Java that takes an integer input n from user. Then take n integer value as input and put them in an array. Now find the index of the smallest number from the input values.

Example: 1<sup>st</sup> Input: 5

2<sup>nd</sup> Input: 7 2 8 1 5

Output: The index of the smallest number is: 3

3. (8 points + 1 point for proper indentation + 1 point for correct output format) Write a program in Java that takes an integer input n from user. Then take n character letter as input and put them in an array. Now, print the ASCII value of each character in the array.

Example: 1<sup>st</sup> Input: 5

2<sup>nd</sup> Input: U n M c S

Output: 85

110

77

99

83

4. (8 points + 1 point for proper indentation + 1 point for correct output format) Write a program in Java that takes an integer input n from user. Then take n character letter as input and put them in an array. Now iterate the array and print yes if the character letter is a vowel, print if the character letter is consonant.

Example: 1<sup>st</sup> Input: 5

2<sup>nd</sup> Input: A B I P U

Output: Yes No Yes No Yes