**************************SUM OF** $1 + \frac{1}{2} + \frac{1}{3} + \cdots \frac{1}{n}$ *******************

PROBLEM NO :01   **DATE: 22/02/2023**

ROLL NO : 1120

STATEMENT OF THE PROBLEM :

Write a C program to calculate the sum $1 + \frac{1}{2} + \frac{1}{3} + \cdots \frac{1}{n}$ *where n is a given positive integer.*

Compute the sum for n=2 ,n=2021 and n=10000.

WORKING RULE:

Step 1 : Read n

Step 2: Set sum=0,i=0

Step 3 : compute sum=sum 1/I

Step 4 : set i=i+1

Step 5 : if i≤n go to step 3

Step 6 : print sum

Step 7 : stop

RESULT:

SIGNATURE OF THE TEACHER

**************ASCENDING ORDER OF n INTEGERS ************

PROBLEM NO :02   **DATE: 06/03/2023**

ROLL NO : 1120

STATEMENT OF THE PROBLEM :

Write a C program to enter n integers into an array and sort the integers in ascending order. Calculate also the number of swap required to sort the given array of integers.

WORKING RULE:

Step 1 : Read n

Step 2: Read x_i $0 \le i \le n$

Step 3 : Set i=1

Step 4 : Set j=i+1

Step 5 : If $x_i < x_j$ go to step 7

Step 6 : Interchange x_i and x_j

Step 7 : If j < n set j=j+1 and go to step 5

Step 8 : Print x_i

Step 9 : If i<n-1 set i=i+1 and go to step 4

Step 10 : Stop

RESULT:

SIGNATURE OF THE TEACHER