29/11/2023

1. Write the floating point version of Complex no representation and addition.

Input: a1 = 4.3, b1 = 8.2

a2 = 5.6, b2 = 7.1

Output: Sum = 9.9 + i15.3

Explanation:

(4.3 + i8.2) + (5.6 + i7.1)

= (4.3 + i8.2) + i(5.6 + i7.1)

= 9.9 + i15.3

2. Compute the average of a list of 5 integer numbers stored in memory and print the result to the user

3. Comapre two floating point numbers and print if they are equal or not

4. Write a program to input electricity unit and calculate the total electricity bill according to the given condition:

For first 50 units Rs. 0.50/unit

For next 100 units Rs. 0.75/unit

For next 100 units Rs. 1.20/unit

For unit above 250 Rs. 1.50/unit

An additional surcharge of 20% is added to the bill.

/\* Calculate electricity bill according to given conditions \*/

if(unit <= 50)

{

amt = unit \* 0.50;

}

else if(unit <= 150)

{

amt = 25 + ((unit-50) \* 0.75);

}

else if(unit <= 250)

{

amt = 100 + ((unit-150) \* 1.20);

}

else

{

amt = 220 + ((unit-250) \* 1.50);

}

/\*

\* Calculate total electricity bill

\* after adding surcharge

\*/

sur\_charge = amt \* 0.20;

total\_amt = amt + sur\_charge;