

NATIONAL INSTITUTE OF TECHNOLOGY CALICUT
Department of Computer Science and Engineering
Winter Semester 2017-2018

CS2093 Hardware Laboratory

Assignment Set 7: Floating point Operations

Instructions

- *All the assignments should be submitted through Eduserver.*
- *Pen drives are not permitted inside the lab.*
- *Practice problems will not be evaluated.*

Practice Questions.

1. Write a program to read two floating point numbers and to print its sum, difference and product.
2. Write a NASM program to find the average of n floating point numbers.

Assignment Problems.

1. Write a program to calculate the perimeter of a circle, it should accept the radius from the user.
2. Write a program to calculate the roots of a quadratic equation.
3. Write a program to sort an array of floating point numbers.
4. Write a program to read a set of floating point numbers (use array to store the values) and find all pairs (a,b) such that $a+b=k$, where a,b are elements of the array and k is a given value.
5. Compute the sin series below:
$$\sin x = x - \frac{(x^3)}{3!} + \frac{(x^5)}{5!} - \frac{(x^7)}{7!} + \dots$$

Calculate Sin(X) by processor instruction and compare the result with the above one.