# CSE 115L: Programming Language I Lab (Section: 06)
## Spring 2020
### Assignment - 02

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**Tasks:**

1. Write a program that will prompt the user to enter two real numbers, then you need to subtract the smaller number from the greater one and show the result.

| input | output |
|---|---|
| Enter two real numbers:<br>45.50<br>98.01 | 98.01 - 45.50 = 52.51 |

2. Write a program that determines if a number is even or odd (use switch-case)

3. Write a program that determines if a quadratic equation has real roots. (use if-else)

Quadratic equation:      $\mathbf{ax^2 + bx + c = 0}$

Discriminant:      $\mathbf{b^2 - 4ac}$

- If discriminant is equal to 0 then the equation has one real solution.
- If discriminant > 0, then the equation has two real solutions.
- If discriminant < 0, then the equation has two imaginary solutions.

| Sample input | Sample output |
|---|---|
| Enter a, b and c where a*x*x + b*x + c = 0<br>1<br>4<br>7 | No real roots |
| Enter a, b and c where a*x*x + b*x + c = 0<br>1<br>2<br>1 | Real roots |
| Enter a, b and c where a*x*x + b*x + c = 0<br>1<br>5<br>6 | Real roots |