Laboratory work: 3

1)

      Calculate and compare function $f(x) = a \cdot sin(x) \cdot exp(-x/100.)$ values in the interval $x \in$ [0., 6.], where Δx = 0.005 to determine algebraically the greatest value of the function. Display the value of the function and its corresponding argument. Prove the result with the function graph (use wgnuplot).

2)

Calculate and compare function $f(x) = a \cdot sin(x) \cdot exp(x/100.)$ values in the interval $x \in$ [0., 6.], where Δx = 0.005 to determine algebraically the smallest value of the function. Display the value of the function and its corresponding argument. Prove the result with the function graph (use wgnuplot).

P.S. a = Last 3 digits of Your student's id card. For example, if id number is 001REC077, then a = 77.