**Program 1**

Pseudocode

* Declare variable to use on the quadratic formula, a, b, c, d, x1, x2
* Include the **cmath** function for mathematical functions
* Use **pow(exp, base)** and **sqrt(value)** for building the formula
* Display the results for each questions

Program code

#include <iostream>

#include <cmath> //for mathematical functions

using namespace std;

int main()

{

    cout <<"\n\tProgram for Math\n";

    int b = 5, a = 3, c = 0, x = 6, y =10; //variable declaration

    double x1, x2;

    x1 = (-b+sqrt(pow(b, 2)-4\*a\*c))/(2\*a); //quadratic formula for calulating x1

    x2 =  (-b-sqrt(pow(b, 2)-4\*a\*c))/(2\*a); //quadratic formula for calulating x2

    cout << "a) x1 = " << x1 << "\tx2 = " << x2 << endl;  //displaying the values of x1 and x2

    double result = pow(x, (y/5));

    cout << "b) results = " << result; //displaying the results of the second expression

    return 0;

}

Screen Dump

