**Assignment Number**: 1.6

**Problem Statement**:

To find roots of a quadratic equation

**Inputs** :

Enter the variables a,b and c.

a=coefficient of

b=coefficient of

c=constant term of eqn.

**Outputs**:

A=first root

B=second root

**Pseudocode**:

* Read the equation
* Enter the variables a,b and c.
* Calculate roots using
* Display results
* Stop

**Program** :calc\_roots.m

% Script File: calc\_roots

% Purpose: To find the roots of a quadratic equation

% Record of Revision:

% Name Date Original

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Satyabrat sahoo 12-08-2015 original code

% Variable declaration

% Input Variables

% a=coefficient of

% b=coefficient of x

% c=constant term

% D=Discriminant

% Output Variable

% A=First root

% B=second root

%%

clc;

clear all;

close all;

% Prompt the user to enter inputs

a=input(‘Enter the coefficient of ’);

b= input(‘Enter the coefficient of x’);

c= input(‘Enter the constant term’);

% calculation

D=sqrt();

A=;

B=;

% Display the result

disp(‘the roots are‘);

disp(A);

disp(B);

**Test Results**:

1.

Enter the coefficient of =4

Enter the coefficient of x = 6

Enter the constant term =2

RESULT

A=-0.5

B=-1

2.

Enter the coefficient of =2

Enter the coefficient of x = 4

Enter the constant term =1

RESULT

A=

B

3.

Enter the coefficient of =1

Enter the coefficient of x =4

Enter the constant term =2

RESULT

A=

B=