**LAB 7**

k=menu('Choice','Odd-Even','Quadratic')

switch k

case 1

prompt={"Enter x"};

title='details';

answer=inputdlg(prompt,title);

x=str2num(answer{1});

oddeven(x)

case 2

prompt={'Enter a','Enter b','Enter c'};

title='details';

answer=inputdlg(prompt,title);

a=str2num(answer{1});

b=str2num(answer{2});

c=str2num(answer{3});

quadratic(a,b,c)

end

function[b]= oddeven(x)

if mod(x,2)==0

disp('Even')

else

disp('Odd')

end

end

function [root1,root2] = quadratic(a,b,c)

if (b^2)>(4\*a\*c)

disp('Real Roots')

elseif (b^2)<(4\*a\*c)

disp('Imaginary Roots')

elseif (b^2)==(4\*a\*c)

disp('Equal Roots')

else

error('Problem')

end

root1=((-1\*(b+(((b^2)-(4\*a\*c))^0.5)))/(2\*a))

root2=((-1\*(b-(((b^2)-(4\*a\*c))^0.5)))/(2\*a))

disp(root1)

disp(root2)

end

**OUTPUT-**

k =

2

Imaginary Roots

root1 =

-0.1000 - 0.7681i

root2 =

-0.1000 + 0.7681i