

USER DRAFT MANUAL

GROUP NO 13

TEAM MEMBERS

1)CHINMAY MAHESHWARI

2)AYUSH BHADORIA

3)ABHAY GAIKWAD

The calculator is designed to perform most of our daily life calculations .

The typical home screen is shown in next page

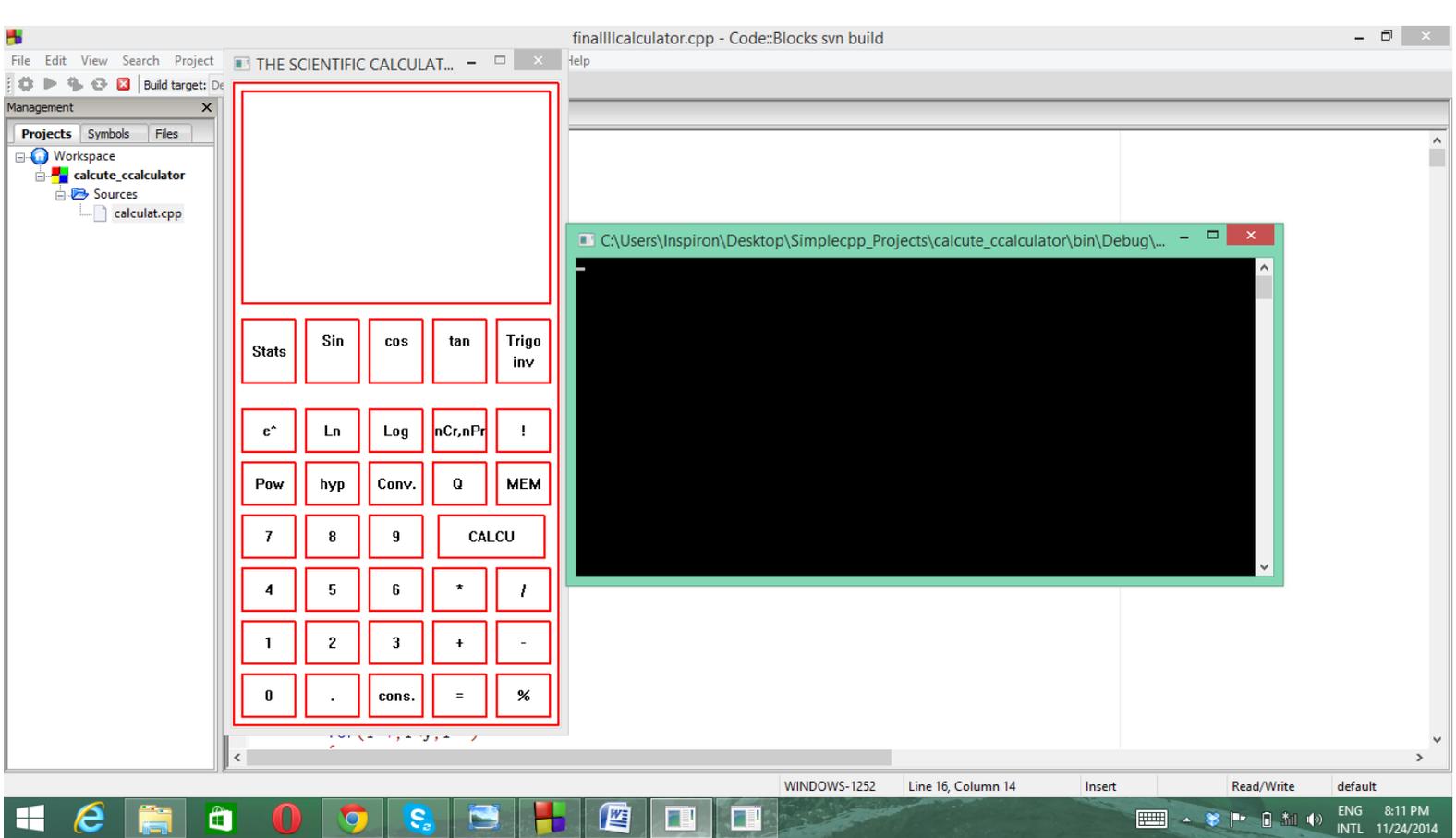
Our program is designed such that the screen will contain

1)canvas screen

2)cpp terminal

The screen with the canvas is outlined with red color

Some functions will be performed on the terminal and some functions will be done on canvas



THE FUNCTIONS WHICH WILL BE PERFORMED WILL BE FOLLOWING :

1) ADDITION , SUBSTRACTION , MULTIPLICATION , DIVISION

The calculator can do addition on two numbers weather integer or with decimal

for this you have to press the appropriate key of numbers (0-9) or with decimal key

then press the operator sign that is (+, -, *, /)

and again press the following number

NOTE: DONT PUT TWO OPERATOR KEYS ANYWHERE ;

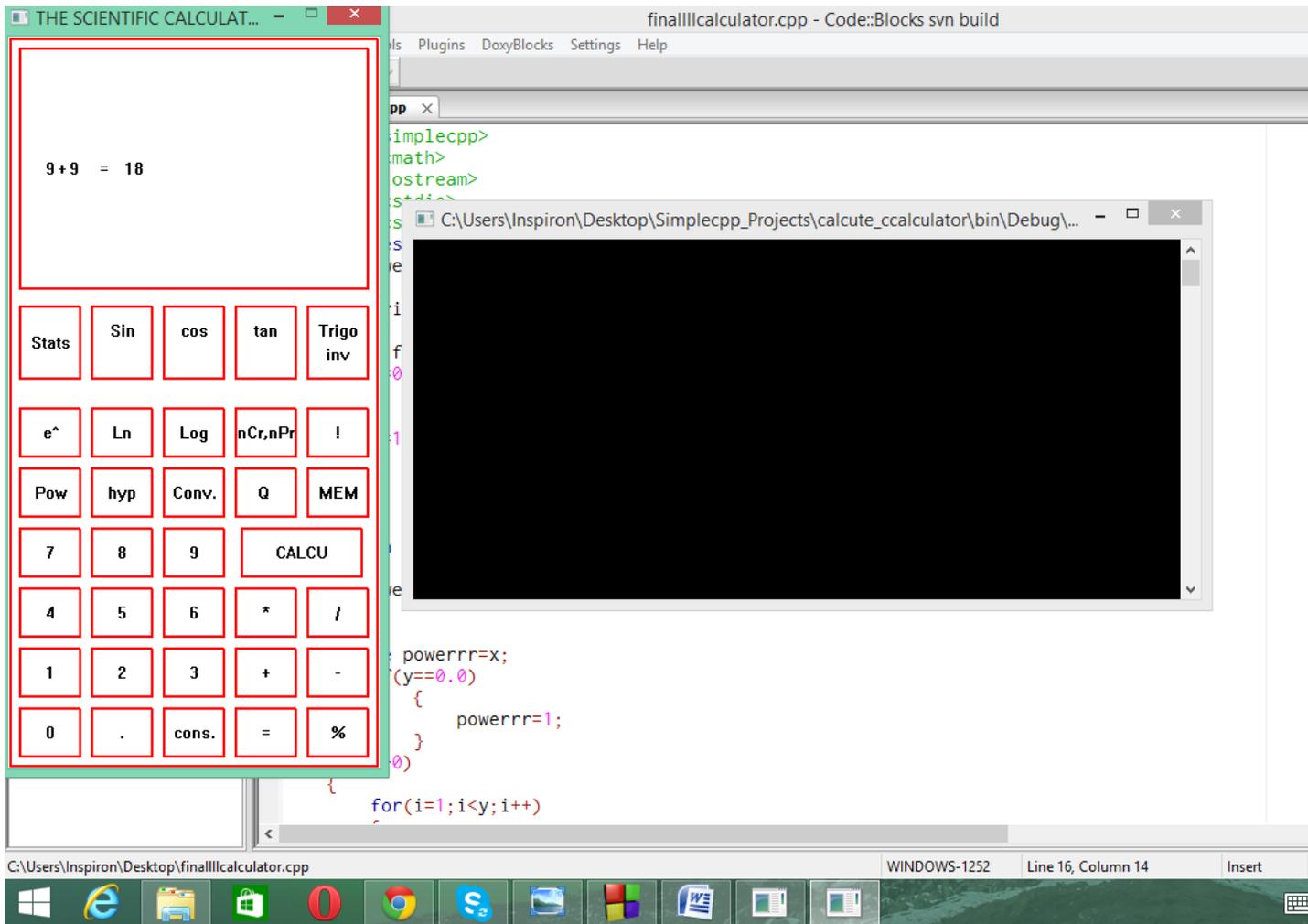


Fig 2 : screen shot of addition

2) APPLYING TRIGNOMETRIC FUNCTIONS

A)for the functions like sine , cosine ,tangent of an angle

the calculator can perform sine ,cosine ,tangent of an angle

the input can be given pressing respective button and then pressing the keys

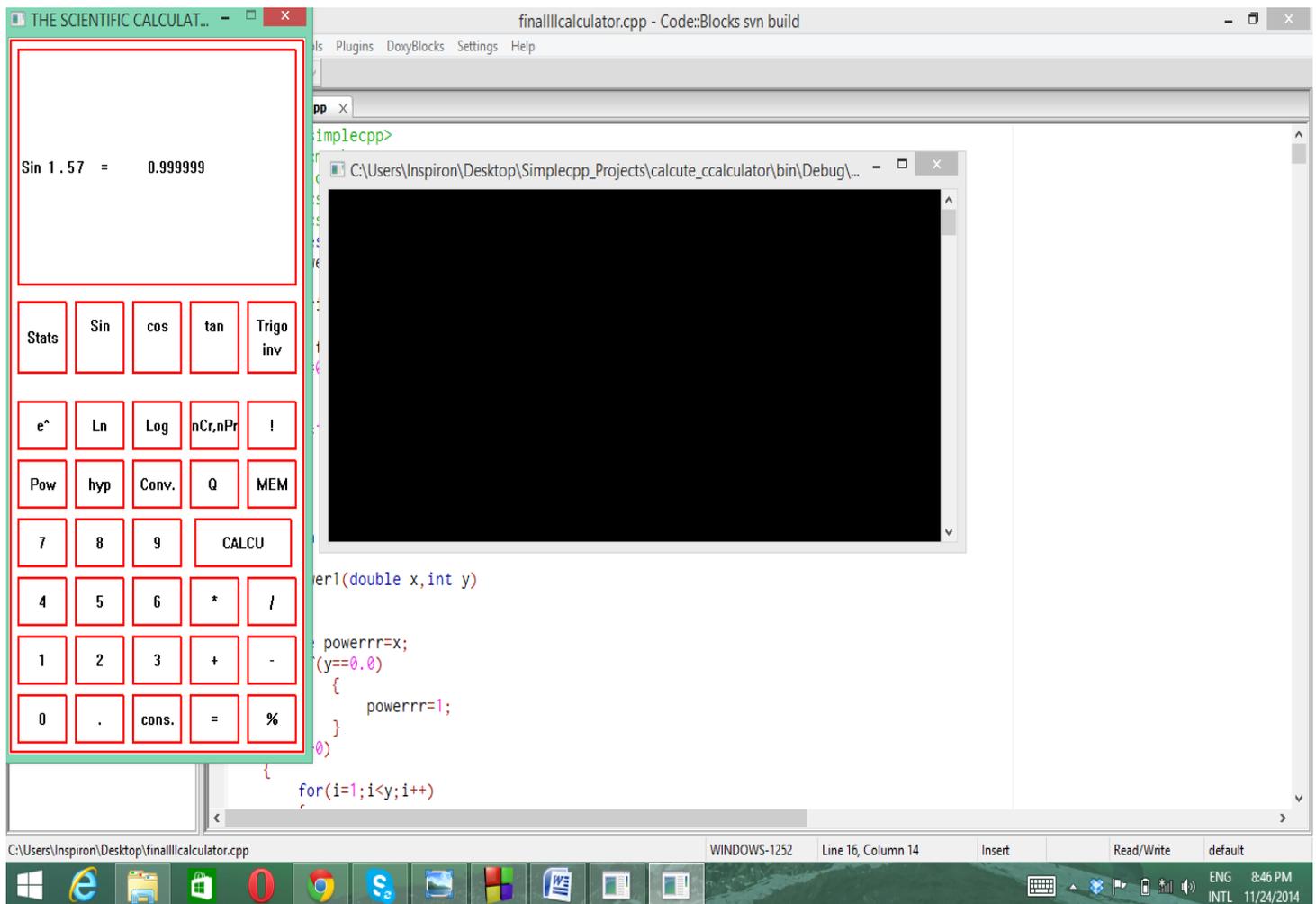


Fig 3 : calculate the sine

IT SHOULD NOTED THAT THE VALUE OF ANGLE SHOULD BE ENTERED IN RADIANS

B)THE OTHER TRIGNO FUNCTIONS LIKE

- 1 SECANT
- 2 COSEC
- 3 COT
- 4 SINE INVERSE
- 5 COS INVERSE
- 6 TAN INVERSE

can be evaluated by first pressing the key "trigo inv."

after this the terminal will appear and then follow procedure as directed

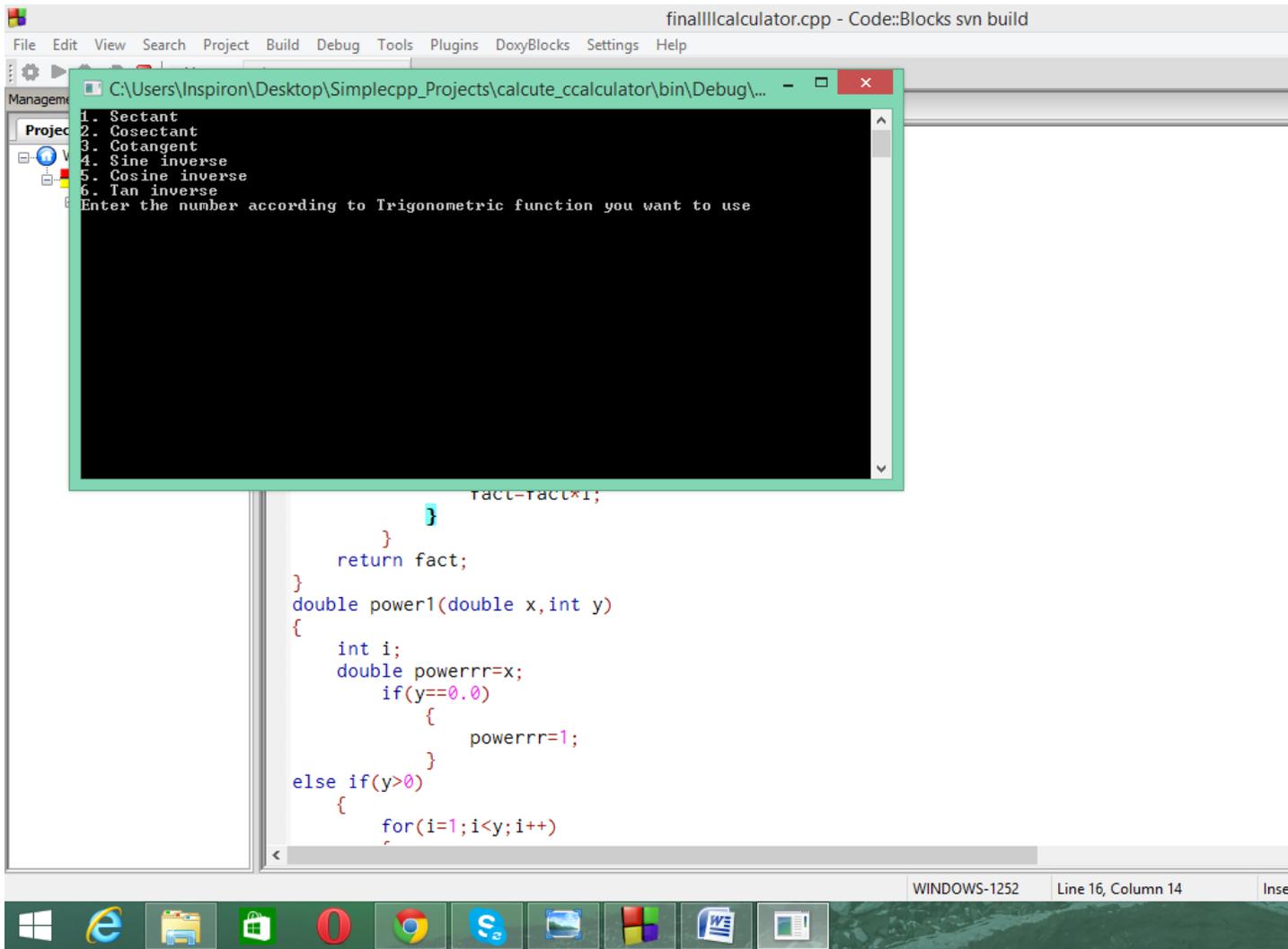


Fig 4) figure of other trigono function

3) FOR LOG ,LN and exponent

press the corresponding key and then type the value of the number ;

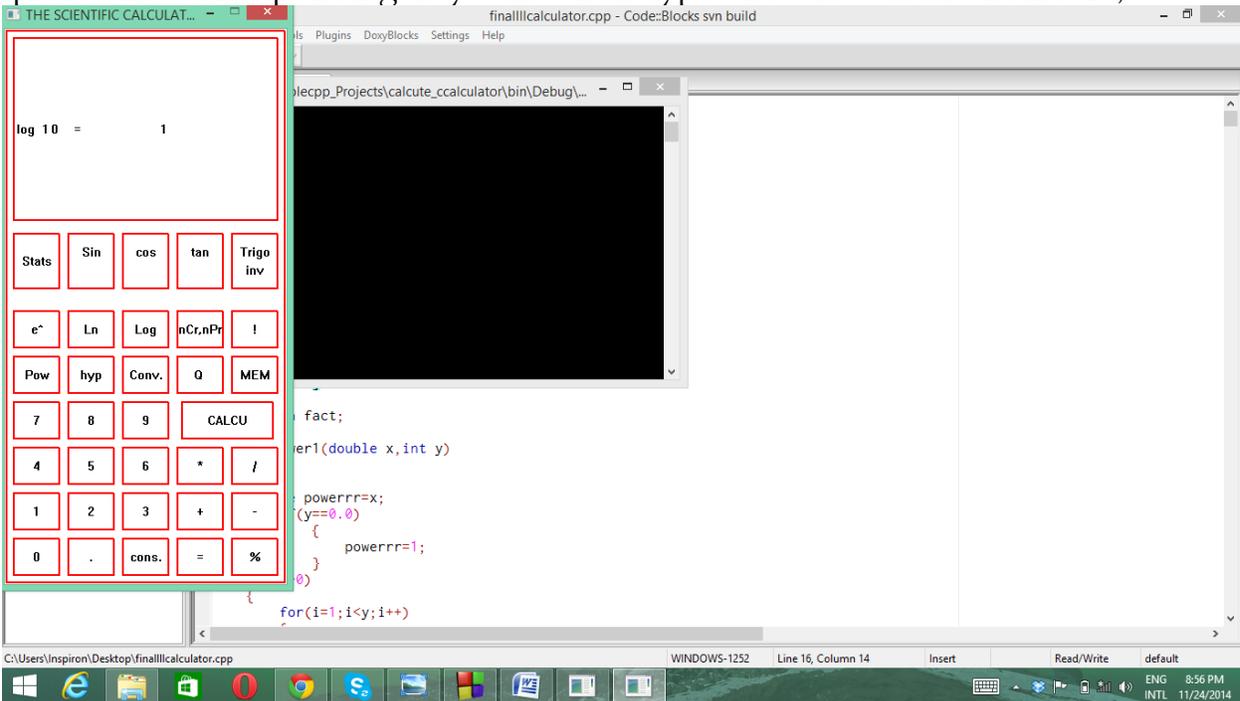


Fig 5) figure to calculate log

4) FOR THE FUNCTIONS LIKE POWER FUNCTION

you can calculate the functions like

1) SQUARE

2) SQUARE ROOT

3) CUBE ROOT

4) GENERAL POWER

The following window will appear after you press the "pow" key

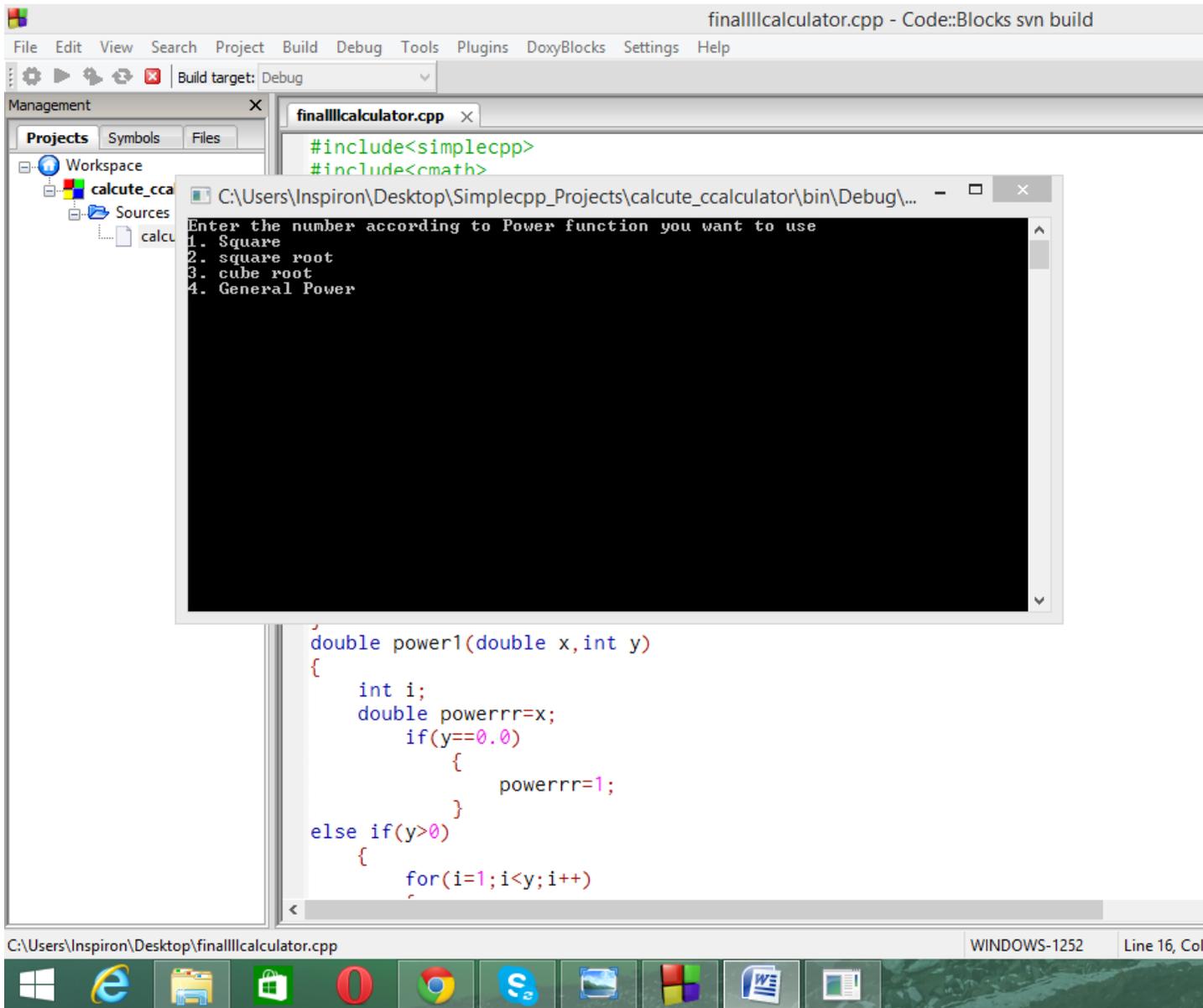


Fig 6)figure to calculate the power

the first three function will be performed by the user as directed by the console

the fourth one

after pressing the fourth number 'you will get the following

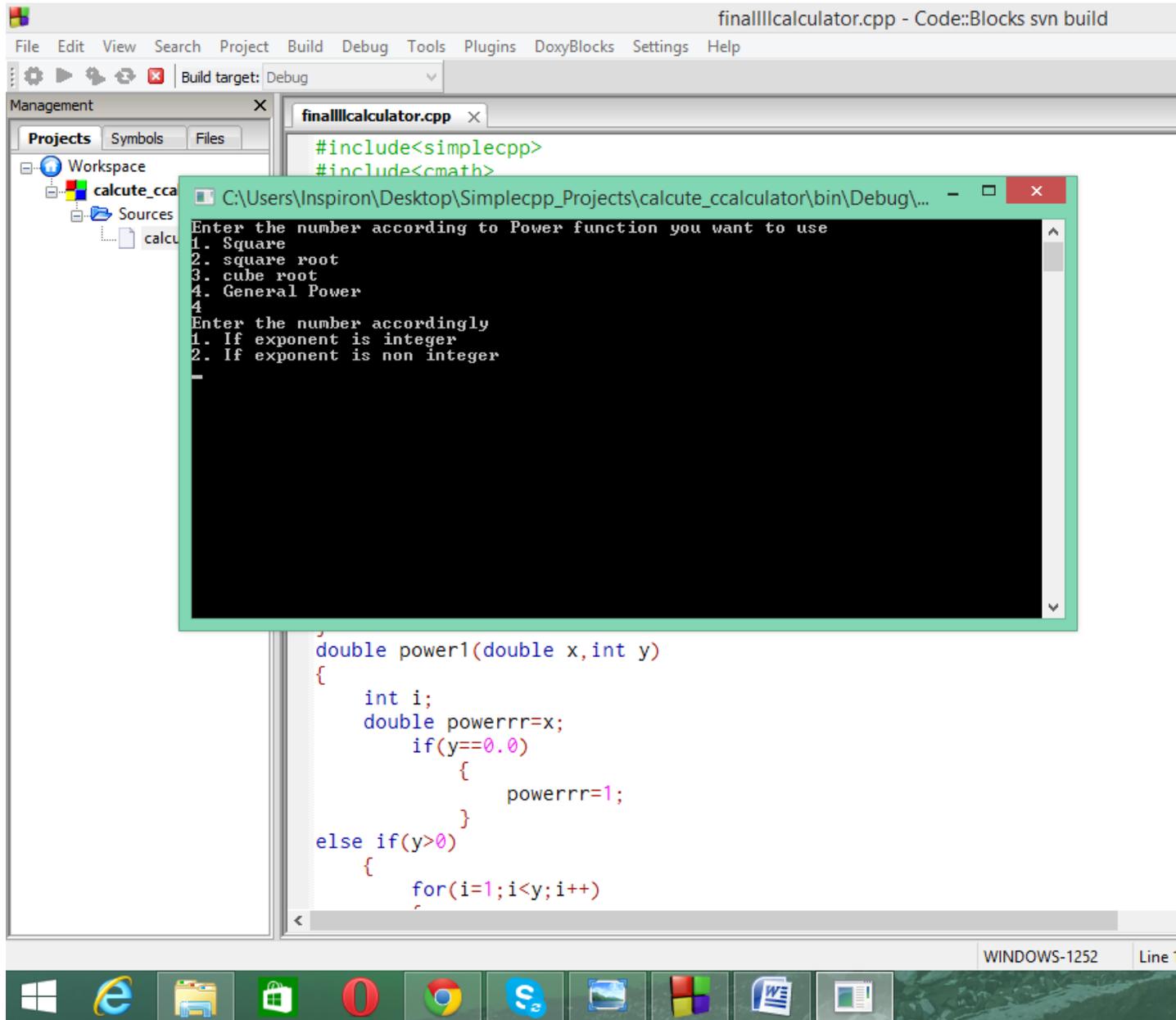


Fig 7) regarding option of "general power"

there will appear two options press desired and go as directed

5) CONVERTING DEGREE TO RADIAN AND VICE VERSA

after you press the key "Conv." you will get a terminal screen as shown below

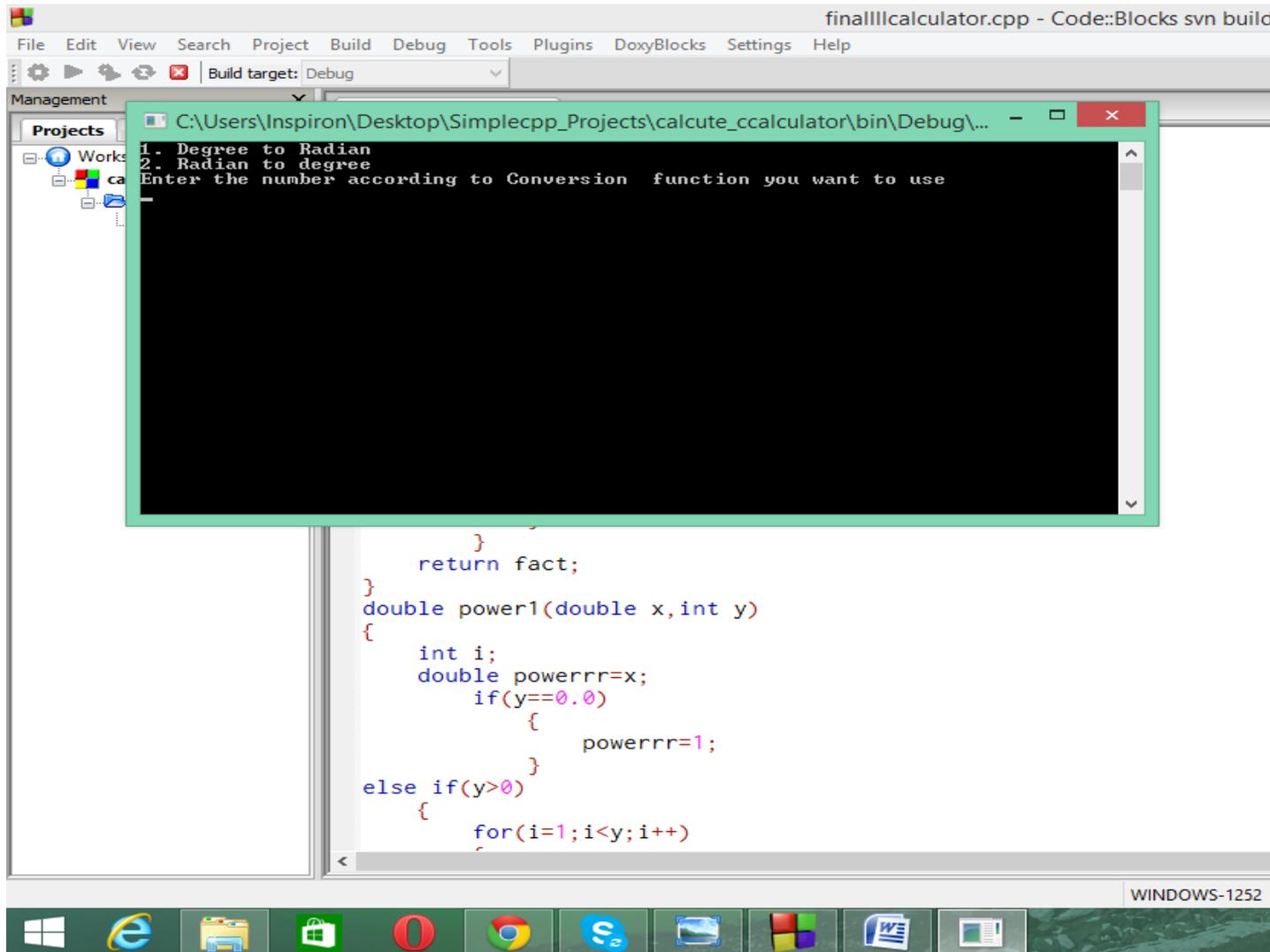


Fig 8) regarding converting of degree to radian

6) HYPERBOLIC FUNCTIONS

the options will be given such that the user can select the number given and perform the operation as directed

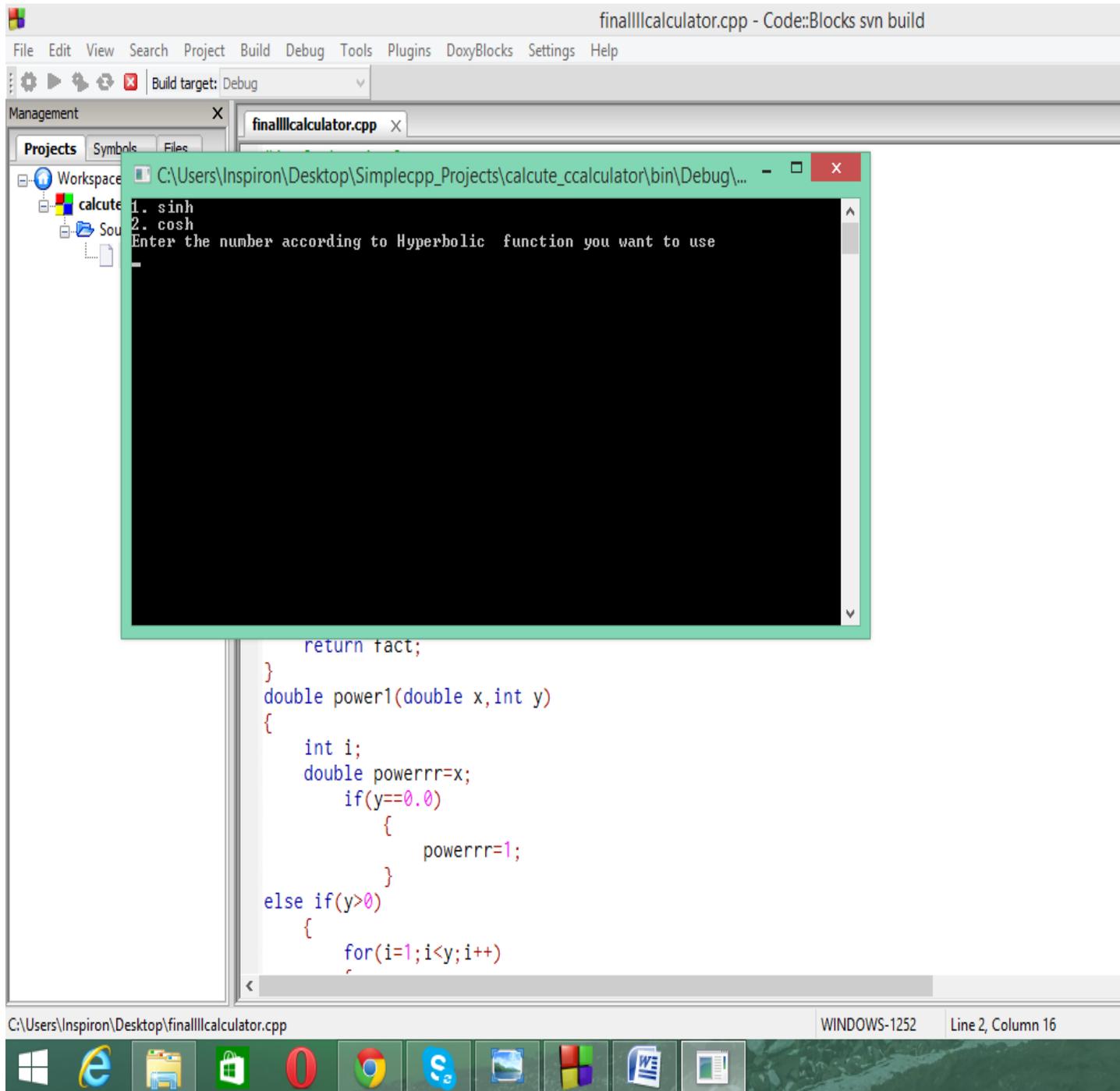


Fig 9) regarding the hyperbolic functions

7)PERFORM OPERATIONS ON SOME STORED ELEMENTS

the user can perform some operations on the entered numbers

the operations consist of

a)SINE

b)COSINE

c)TANGENT

d)LOGRITHM

e)EXPONENTIAL

f)POWER

g)FACTORIAL

h)SINE INVERSE

i)COSINE INVERSE

j)SQ ROOT

k)CUBE ROOT

l)TAN INVERSE

```
finalllcalculator.cpp [CALCI] - Code::Blocks svn build
Debug Tools Plugins DoxyBlocks Settings Help
llcalculator.cpp x
{
    cout<<i+1<<"
    "<<array number[i]<<"
    "<<end
    nt you wish to use"<<
    o perform on it"<<end
    ndl;
    l;
    dl;
    ndl;
    "<<endl;
    ;
    int choice;
    cin>>choice;
    switch(choice)
    {
    case 1:cout<<" sine you wish to calculate in radians"<<endl;
        cout<<"The sine of your input data is "<<sine_of_angle(array_number[l-1])<<endl;
        break;
    case 2 :cout<<"cosine you wish to calculate in radians"<<endl;
        cout<<"The cosine of your input data is "<<cosine_of_angle(array_number[l-1])<<endl;
    }
}
C:\Users\Inspiron\Desktop\Simplecpp_Projects\CALCI\bin\Debug\CALCI.exe
enter your choice
press your choices after pressing caps lock ON
for storing a value press S
for retriving a value press R
for exitng press E
$
your current status is that you have used 0 number of elements
enter your 1 element
53
enter your choice
press your choices after pressing caps lock ON
for storing a value press S
for retriving a value press R
for exitng press E
$
your current status is that you have used 1 number of elements
enter your 2 element
62
enter your choice
press your choices after pressing caps lock ON
for storing a value press S
for retriving a value press R
for exitng press E
$

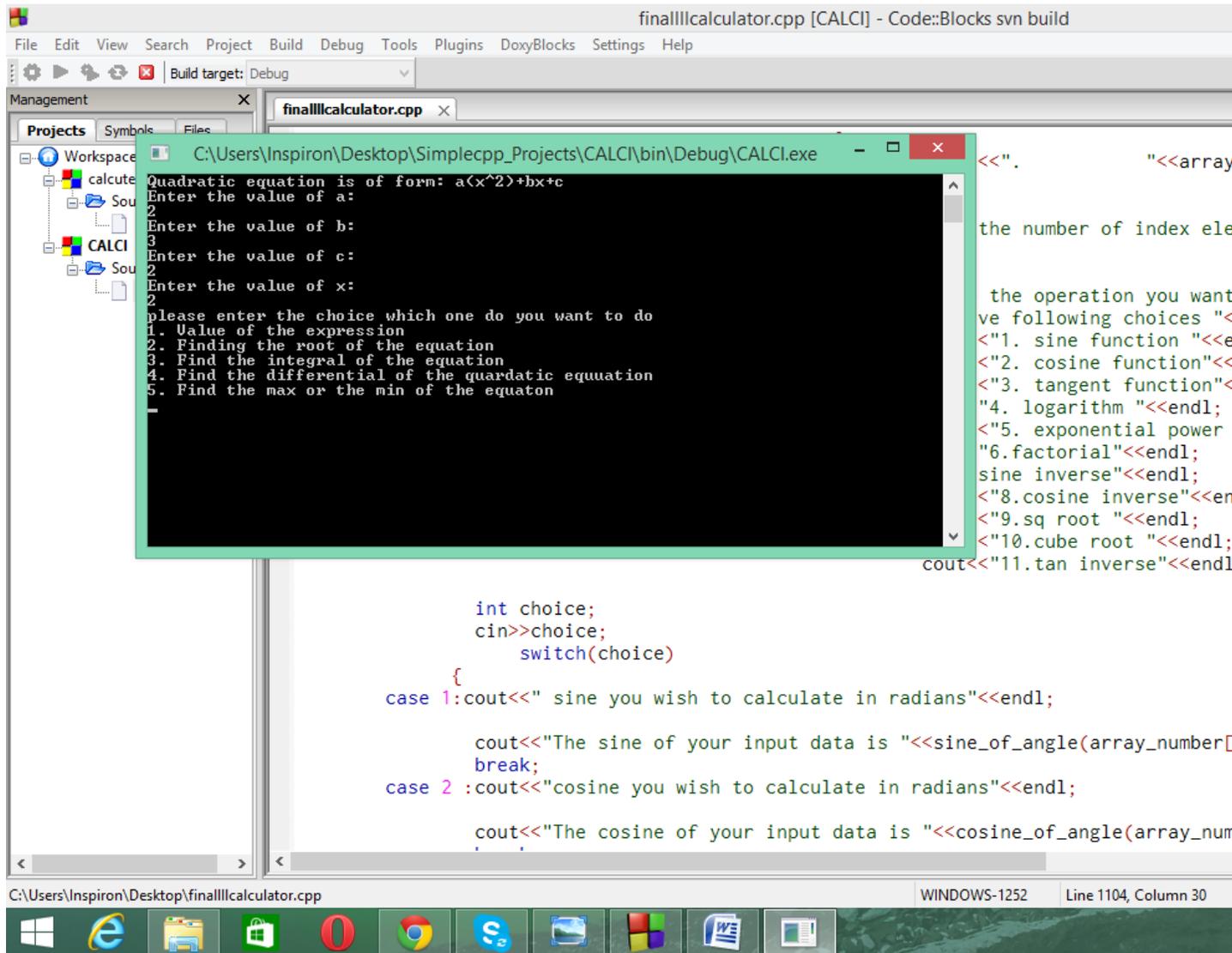
```

Fig 10) regarding "MEM" functons

8)FOR ANALYSING A GIVEN QUADRATIC EXPRESSION

After pressing the "Q" key

you will get the window appearing as



```
finalllcalculator.cpp [CALCI] - Code::Blocks svn build
File Edit View Search Project Build Debug Tools Plugins DoxyBlocks Settings Help
Build target: Debug
Management
Projects
Workspace
C:\Users\Inspiron\Desktop\Simplecpp_Projects\CALCI\bin\Debug\CALCI.exe
Quadratic equation is of form: a(x^2)+bx+c
Enter the value of a:
2
Enter the value of b:
3
Enter the value of c:
2
Enter the value of x:
2
please enter the choice which one do you want to do
1. Value of the expression
2. Finding the root of the equation
3. Find the integral of the equation
4. Find the differential of the quardatic equation
5. Find the max or the min of the equaton
-
<<"< "11.tan inverse"<<endl;
int choice;
cin>>choice;
switch(choice)
{
case 1:cout<<" sine you wish to calculate in radians"<<endl;
cout<<"The sine of your input data is "<<sine_of_angle(array_number[
break;
case 2 :cout<<"cosine you wish to calculate in radians"<<endl;
cout<<"The cosine of your input data is "<<cosine_of_angle(array_num
```

Fig 11)regarding solving quadratic equation

the functions in the quadratic are

a)finding roots

b)finding minimum and maximum of a function

c)evaluating the integral

d)finding derivative at entered point

e)finding integral at the integral

9)FINDING FACTORIAL

there is given a key "!"

on clicking on it will redirect us to the terminal on which we are asked to enter the value of factorial

10)FINDING COMBINATION AND PERMUTATION

this feature provide us to find the combination and permutation

on clicking on "**nCr,nPr**" you will be directed to the window as given below

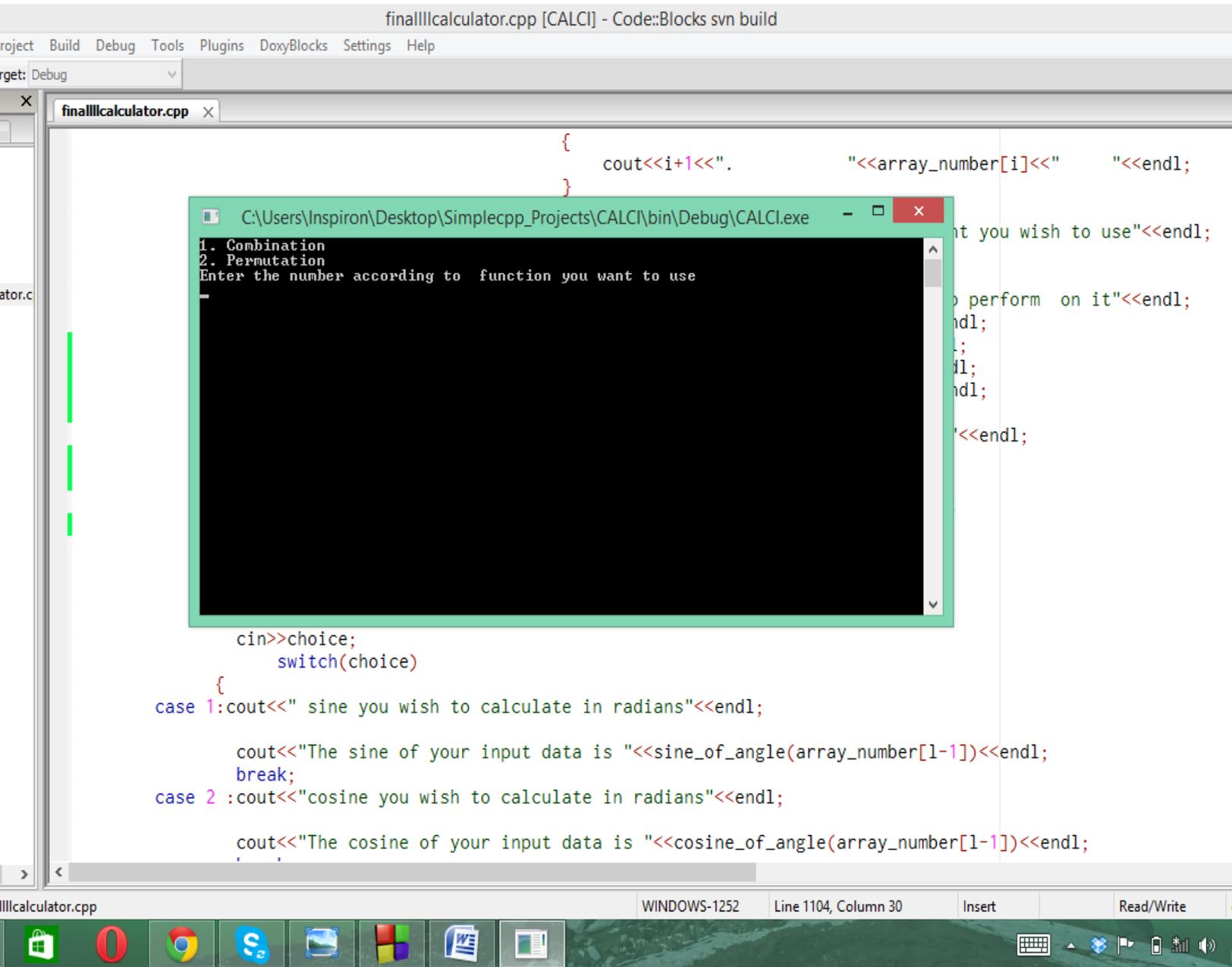


Fig 12)regarding combinations and permutations

11) FOR STATISTICAL CALCULATIONS

the calculator provides user with some of the statistical functions

namely

1)mean

2)mode

3)median

4)standard deviation

5)finding the least square line

you have to just click "**Stats**" button

you will be directed to the following window

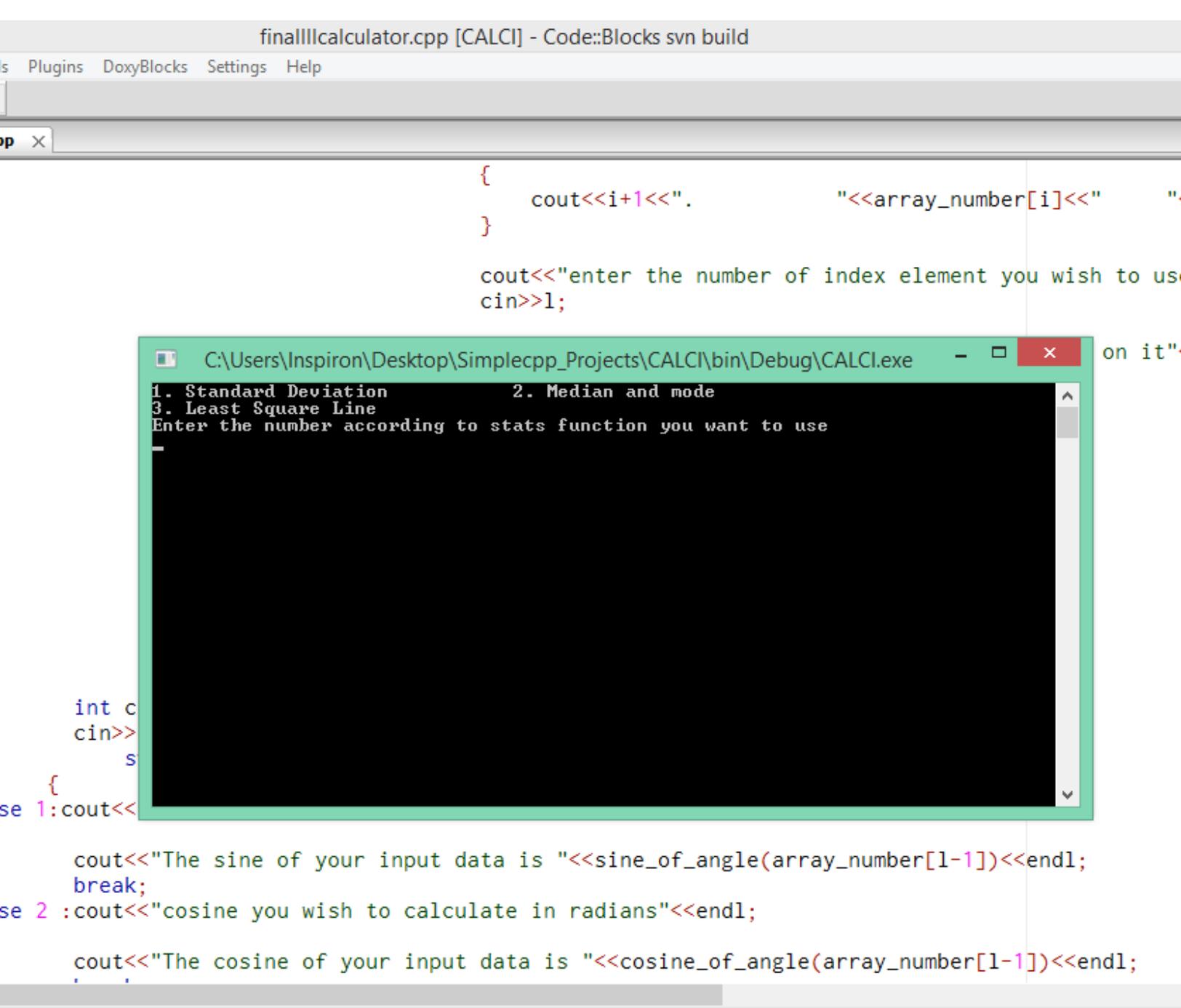


Fig 13)regarding statistical calculations

12) FOR SOME CONSTANTS

when you click on the "Const." button you get the list of some of the physical constants

so it is simple and easy to use package

stay calculating :)