M1 HOMETASK 1

```cpp
#include <iostream>
using namespace std;

int main() {
    int x1, x2, y1, y2;
    double x_value, y_value, result; // Use double for more accurate cal

    cout << "Enter the 'x' coordinates of the points:\n";
    cin >> x1;
    cin >> x2;

    cout << "Enter the 'y' coordinates of the points:\n";
    cin >> y1;
    cin >> y2;

    // Calculate the squared differences for x and y
    x_value = pow(x2 - x1, 2);
    y_value = pow(y2 - y1, 2);

    // Calculate the distance using the distance formula
    result = sqrt(x_value + y_value);

    cout << "The distance between the points is: " << result << "\n";

    return 0;
}
```

M1 HOMETASK 2

[*] Untitled1

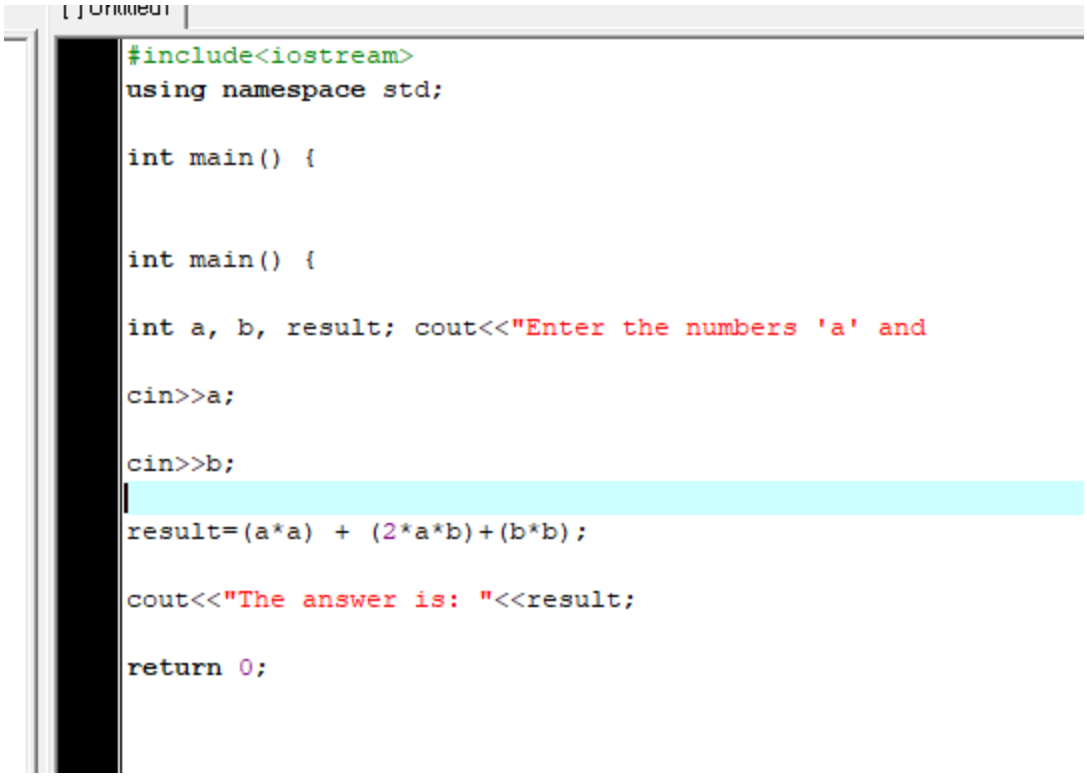
```cpp
#include <iostream>
using namespace std;

int main() {
    float lincm, linm, linkm;

    cout << "Enter the length in centimeters: ";
    cin >> lincm;

    cout << "The length in meters is: " << lincm / 100 << endl;
    cout << "The length in kilometers is: " << lincm / 100000 << endl;

    return 0;
}
```

M1 HOMETASK 3

[*] Untitled1

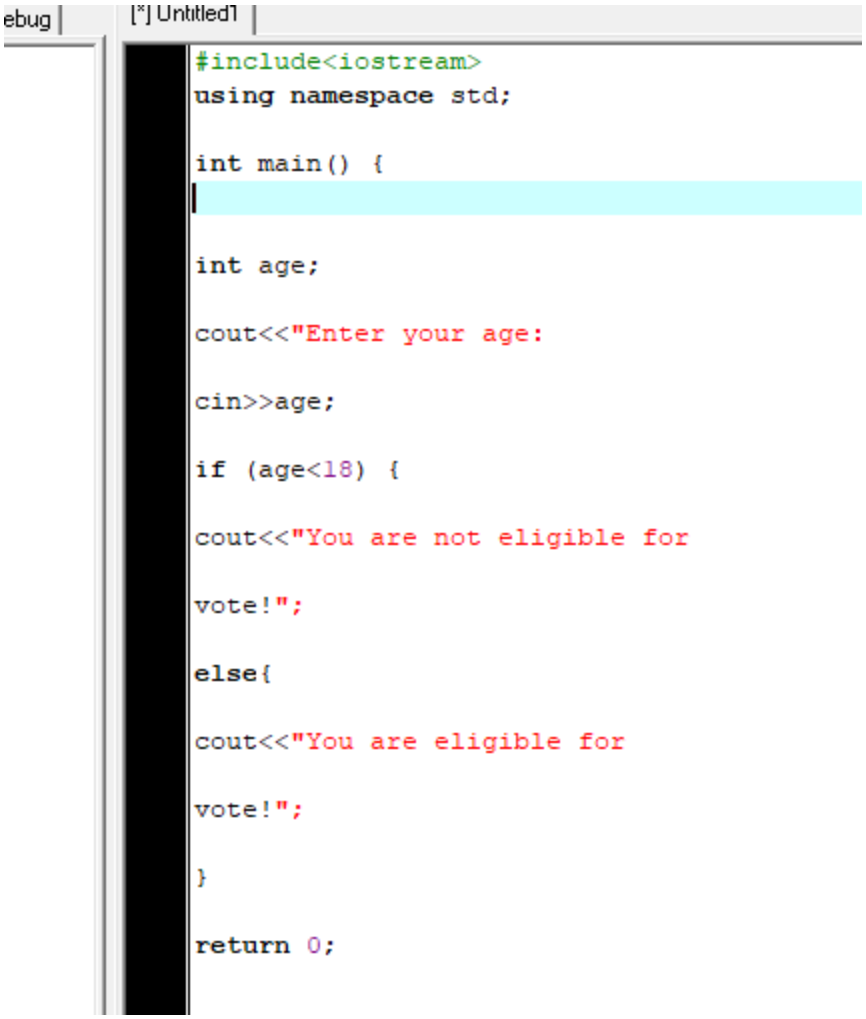
```cpp
using namespace std;

int main() {

int a, b, result; cout<<"Enter the numbers a and b:";

cin>>a;

cin>>b;

result=(a*a) + (2*a*b)+(b*b);

cout<<"The answer is: "<<result;

return 0; }
```

M1 HOMETASK 4

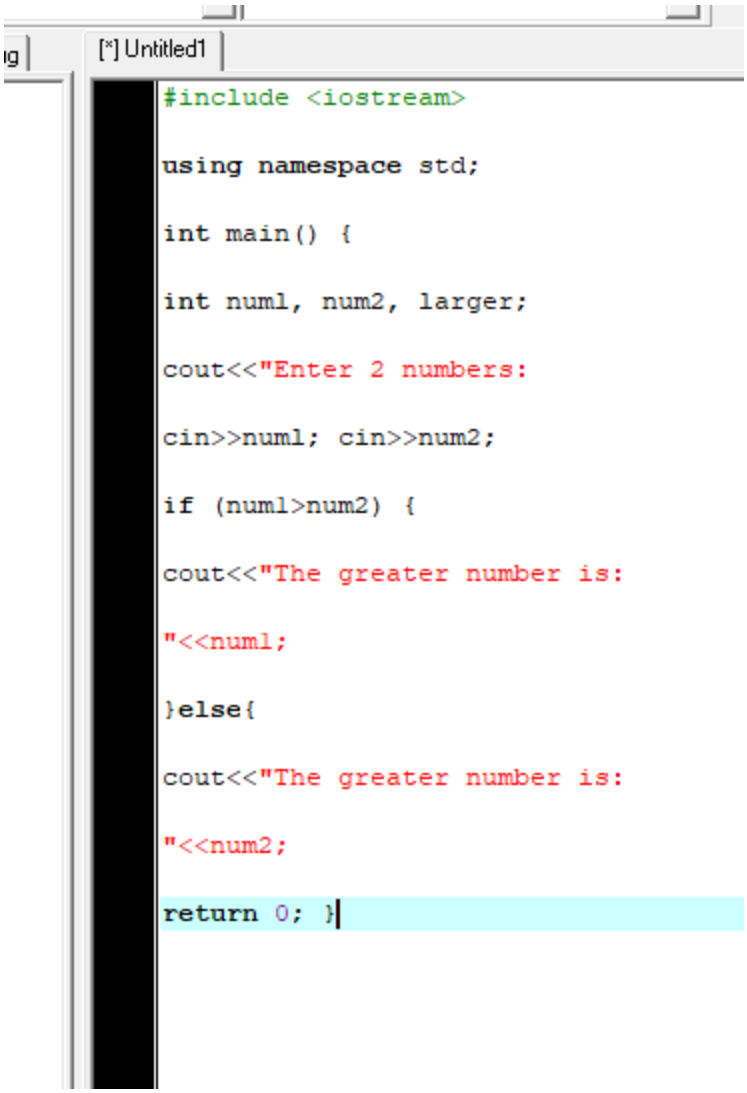


```cpp
#include<iostream>
using namespace std;

int main() {


int main() {

int a, b, result; cout<<"Enter the numbers 'a' and

cin>>a;

cin>>b;

result=(a*a) + (2*a*b)+(b*b);

cout<<"The answer is: "<<result;

return 0;
```

M 2 LAB TASK 1


ebug
[*] Untitled1
#include<iostream>
using namespace std;
int main() {
int age;
cout<<"Enter your age:
cin>>age;
if (age<18) {
cout<<"You are not eligible for
vote!";
else{
cout<<"You are eligible for
vote!";
}
return 0;

M2 LAB TASK 3


[*] Untitled1
#include <iostream>
using namespace std;
int main() {
int num1, num2, larger;
cout<<"Enter 2 numbers:
cin>>num1; cin>>num2;
if (num1>num2) {
cout<<"The greater number is:
"<<num1;
}else{
cout<<"The greater number is:
"<<num2;
return 0; }

M2 LAB TASK 4

*] Untitled1

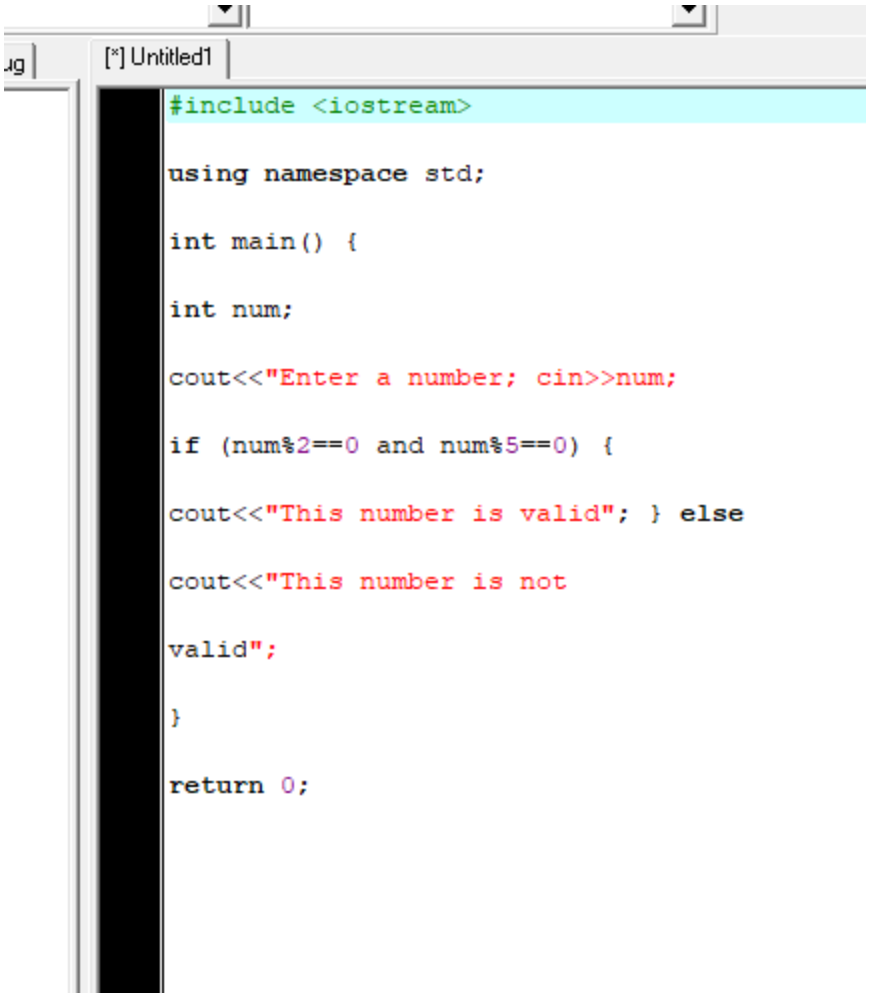
```
#include <iostream> using namespace std;

int main() {

int marks1, marks2, marks3, avg; cout<<"Enter marks of three

subjects: "; cin>>marks1;

cin>>marks2;

cin>>marks3; avg= (marks1+marks2+marks3)/3;

if (avg>=60) { cout<<"You have passed!";

}

else{

cout<<"You have failed!";

return 0; }
```

M2 HOME TASK 1

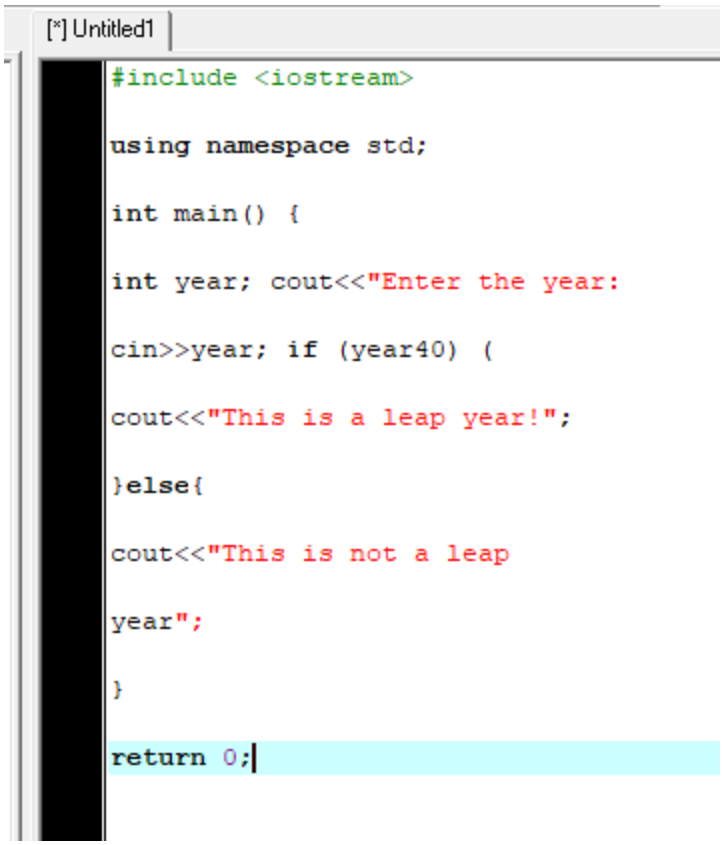
[*] Untitled1

```
# using namespace std;

int main() {

int marks;

cout<<"Enter your marks:

cin >marks;

if (marks>90 and marks<-100) (

cout<<"A grade!";

else if (marks>75 and marks<=90) [ cout<<"B grade!";

else if (marks>60 and marks<=75) {

cout << "C grade!";

else if (marks>45 and marks<=60) [

cout << " grade!"; else if (marks>=0 and marks<=45) [

cout<<"E grade!";

return 0;
```

M2 HOME TASK 2



M2HOME TASK 3



M2 HOME TASK 5

```
#include <iostream>

namespace std;

char letter;

using int main() {

cout<<"Enter a letter: "; cin>>letter;

if (letter=='a' or letter=='e' or

letter=='i' or letter == 'o' or

letter=='u'){

cout<<"The letter is a vowel";

}else{

cout<<"The letter is not a

vowel";

return 0;;
```