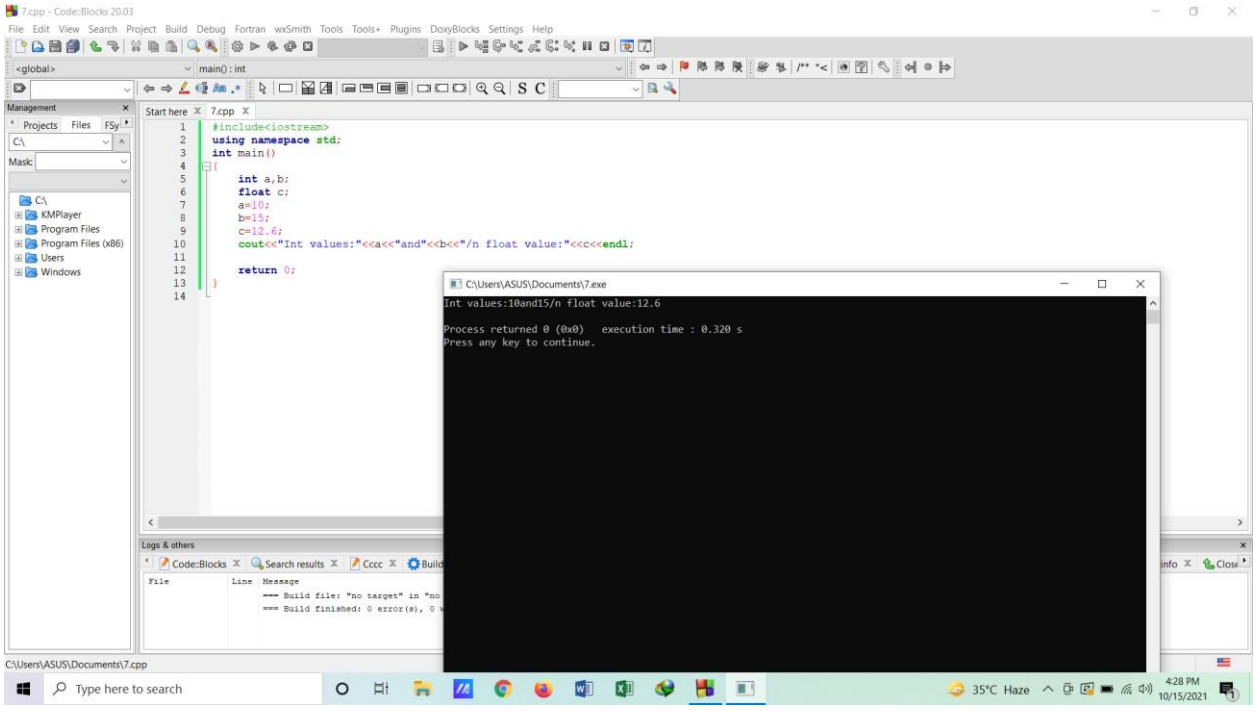
1. A Program To Declare Two Integers and One Float Variables Then Initialize Them To 10,15 and 12.6 and Print the Variable Values In The Screen :

```
#include<iostream>

using namespace std;

int main()

{

 int a,b;

float c;

a=10;

 b=15;

c=12.6;

    cout<<"Int values:"<<a<<"and"<<b<<"/n float value:"<<c<<endl;


    return 0;

}
```

Result :

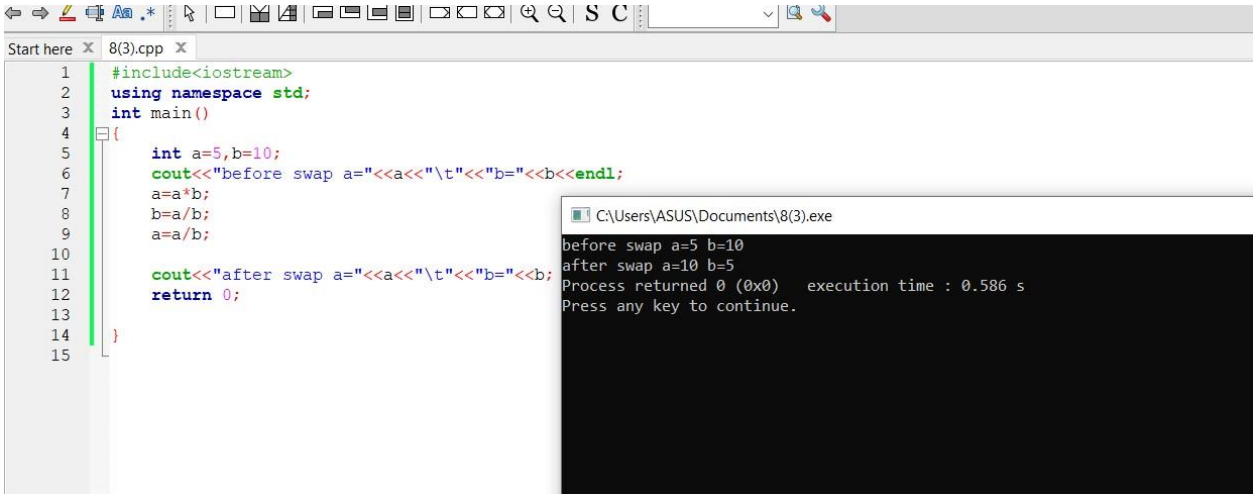


2.Write a program to swap into two variable values with and without using third variables :

Code :

```
#include<iostream>
using namespace std;
int main() {
   int a=5,b=10;
   cout<<"before swap a="<<a<<"\t"<<"b="<<b<<endl;
a=a*b;     b=a/b;
   a=a/b;

   cout<<"after swap a="<<a<<"\t"<<"b="<<b;
return 0;

}
```

Result:



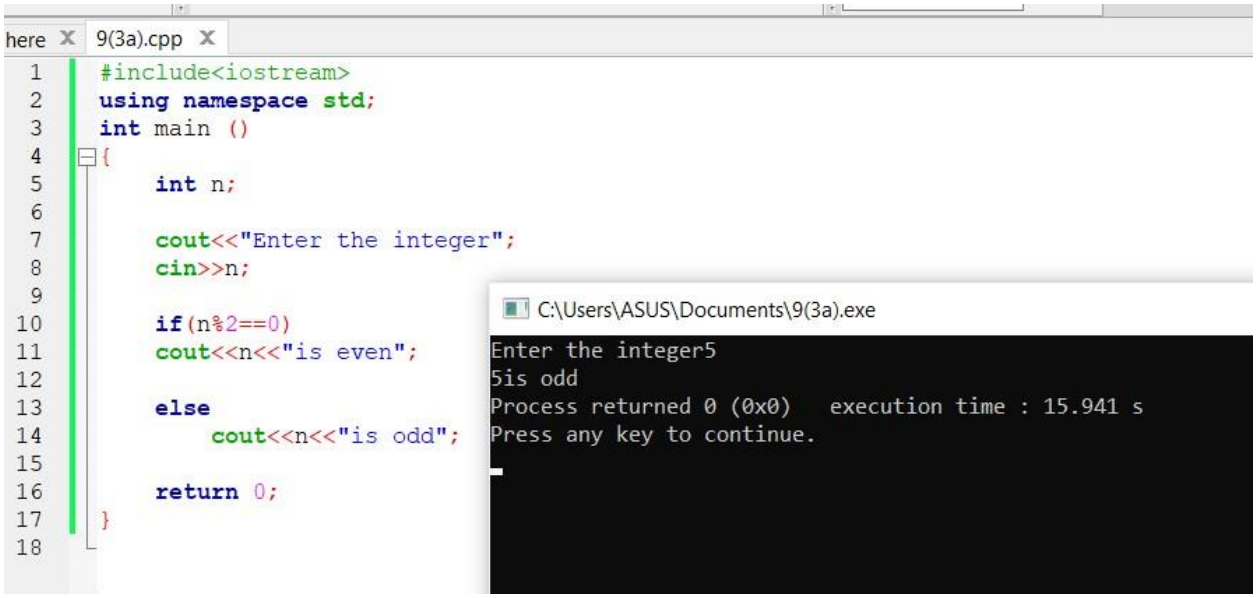
3.(a)Write a program to check a even or a odd number : (using a modulus operator)

Code:

```
#include<iostream> using
namespace std;
int main ()
{
  int n;

   cout<<"Enter the integer";
cin>>n;
```

```
   if(n%2==0)
cout<<n<<"is even";

   else
      cout<<n<<"is odd";

   return 0;
}
```

Result:

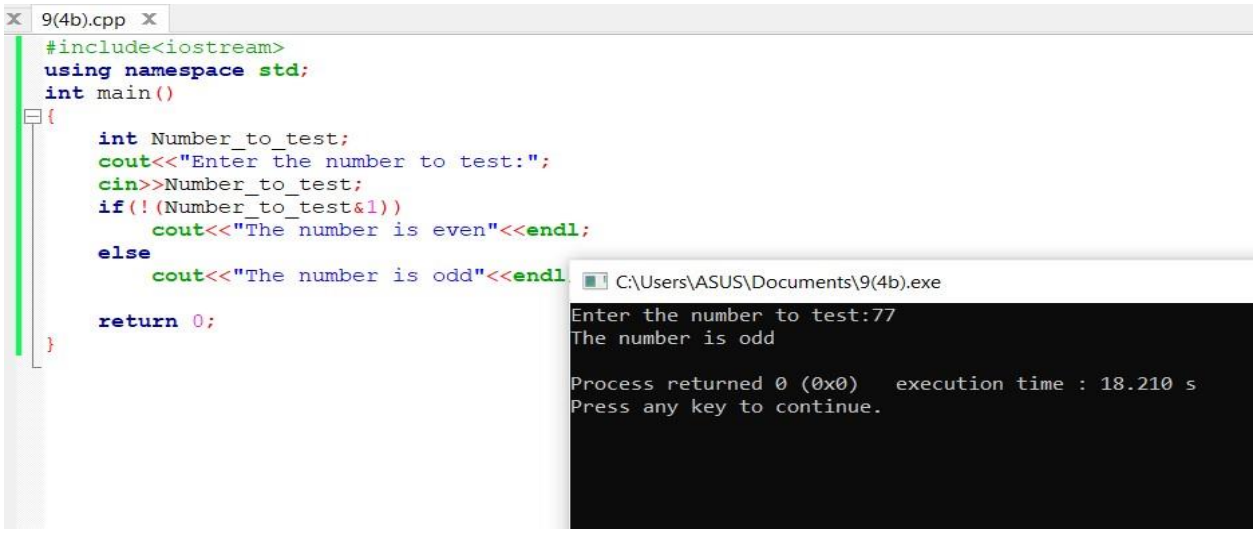


3. (b**) Write a program to check a even or a odd number :**
(Using a bitwise operator)

Code:

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



int main() {
   int Number_to_test;
   cout<<"Enter the number to test:";
   cin>>Number_to_test;
if(!(Number_to_test&1))
      cout<<"The number is even"<<endl;
else
      cout<<"The number is odd"<<endl;

   return 0;
}
```

Result:



3. (c) Write a program to check a even or a odd number :

(Without using a bitwise and modulus operator)

Code:

```
 #include<iostream>
using namespace std;
int main() {
   int Number_to_test;

   cout<<"Enter your number to test:";
cin>>Number_to_test;

   if((Number_to_test/2)*2==Number_to_test)
cout<<"The number is even"<<endl;     else
       cout<<"The number is odd"<<endl;

   return 0;
}
```

Result:

here 9(4c).cpp

```cpp
#include<iostream>
using namespace std;
int main()
{
    int Number_to_test;

    cout<<"Enter your number to test:";
    cin>>Number_to_test;

    if((Number_to_test/2)*2==Number_to_test)
        cout<<"The number is even"<<endl;
    else
        cout<<"The number is odd"<<endl;

    return 0;
}
```

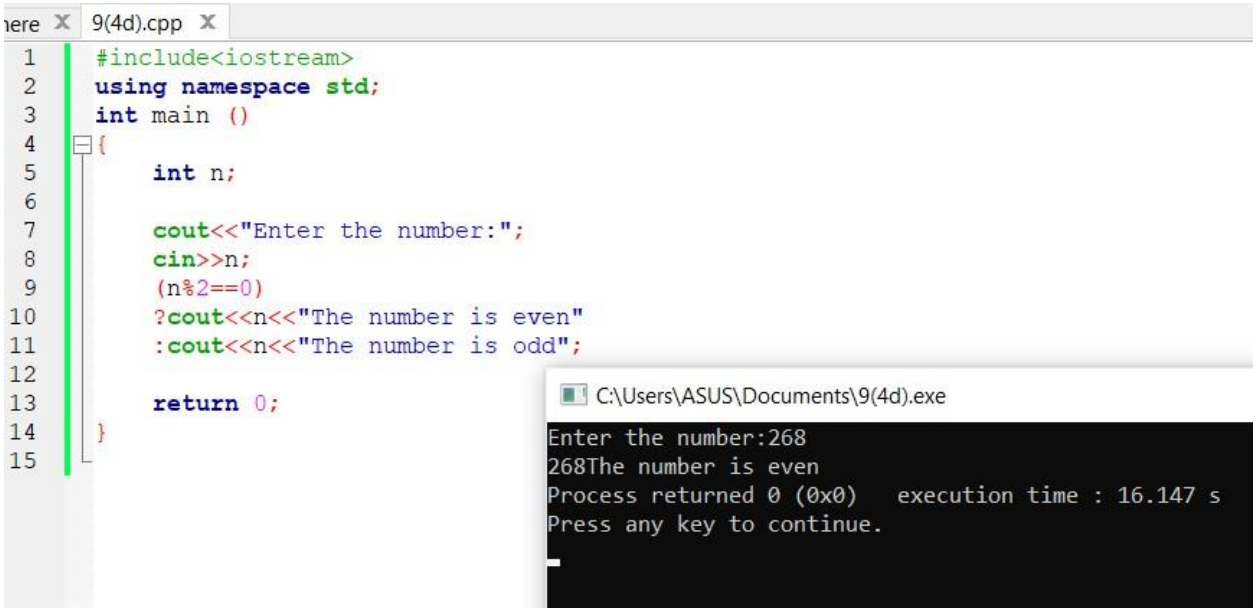
```
C:\Users\ASUS\Documents\9(4c).exe
Enter your number to test:89
The number is odd

Process returned 0 (0x0)   execution time : 10.565 s
Press any key to continue.
```

3. (d**).Print the value of y for given x=2 and z=4 and analyze the output.**
(Using conditional operator)

Code:

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

int main ()
{
 int n;

   cout<<"Enter the number:";
   cin>>n;
   (n%2==0)
   ?cout<<n<<"The number is even"
   :cout<<n<<"The number is odd";

   return 0;
}
```

Result:

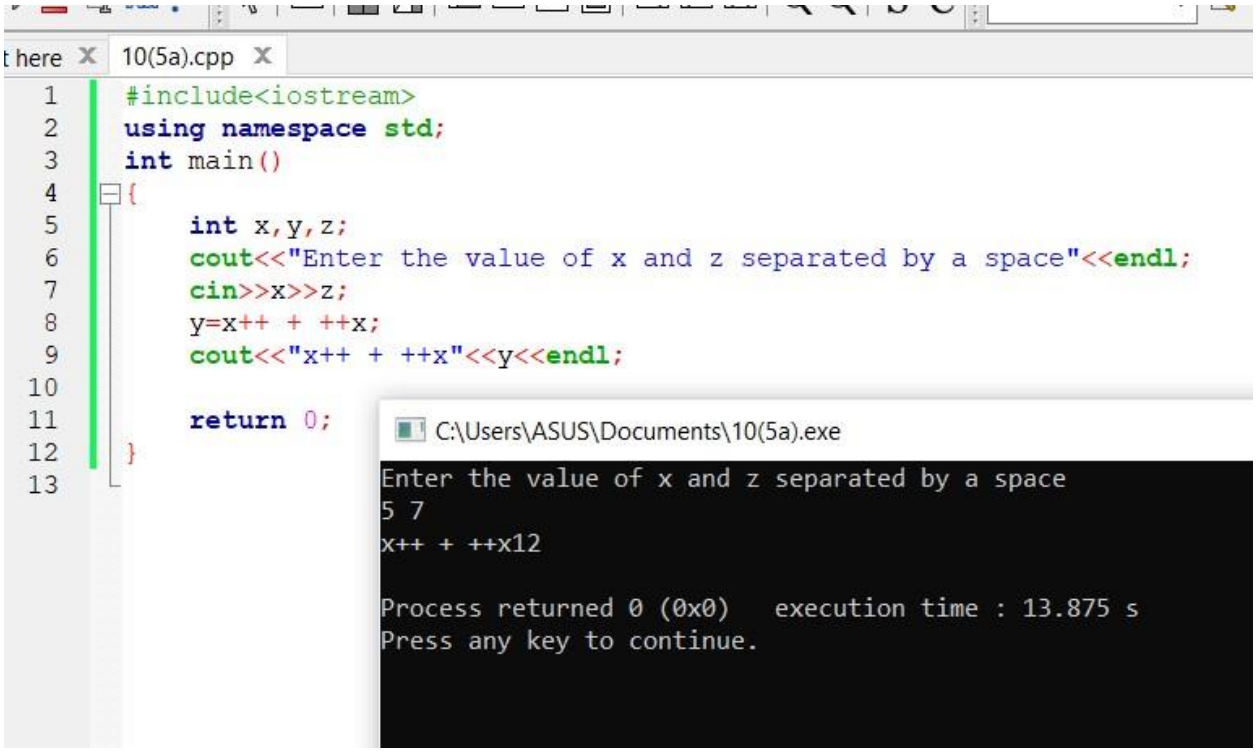

here
9(4d).cpp
#include<iostream>
using namespace std;
int main ()
{
int n;
cout<<"Enter the number:";
cin>>n;
(n%2==0)
?cout<<n<<"The number is even"
:cout<<n<<"The number is odd";
return 0;
}
C:\Users\ASUS\Documents\9(4d).exe
Enter the number:268
268The number is even
Process returned 0 (0x0) execution time : 16.147 s
Press any key to continue.

5(a).Print the value of y for given x=2 and z=4 and analyze the output.
Here, y=x++ + ++x

Code :

```
#include<iostream>
using namespace std;
int main()
{
int x,y,z;
   cout<<"Enter the value of x and z separated by a space"<<endl;
cin>>x>>z;     y=x++ + ++x;
   cout<<"x++ + ++x"<<y<<endl;

   return 0;
}
```

Result :

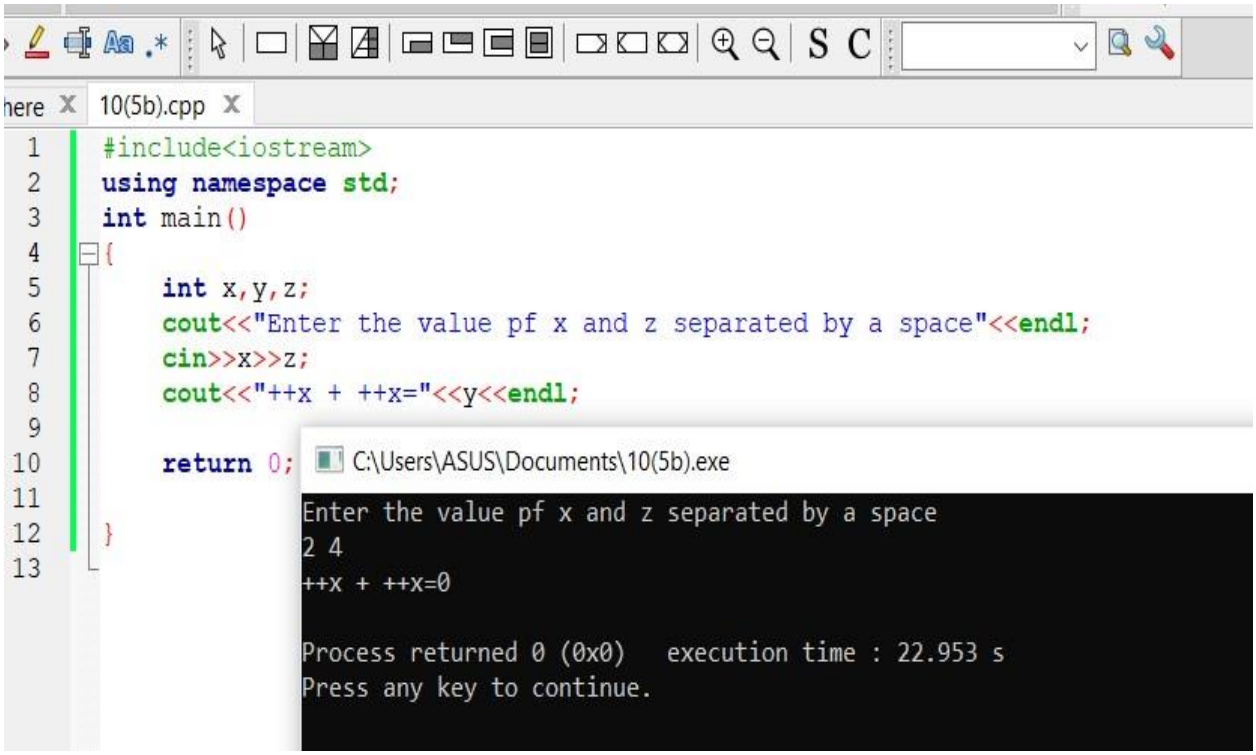


5(b).Print the value of y for given x=2 and z=4 and analyze the output.
Here, y=++x + ++x

Code:

```
#include<iostream>
 using namespace std;
int main()
{
int x,y,z;
   cout<<"Enter the value pf x and z separated by a space"<<endl;
cin>>x>>z;
   cout<<"++x + ++x="<<y<<endl;

   return 0;

}
```

Result :

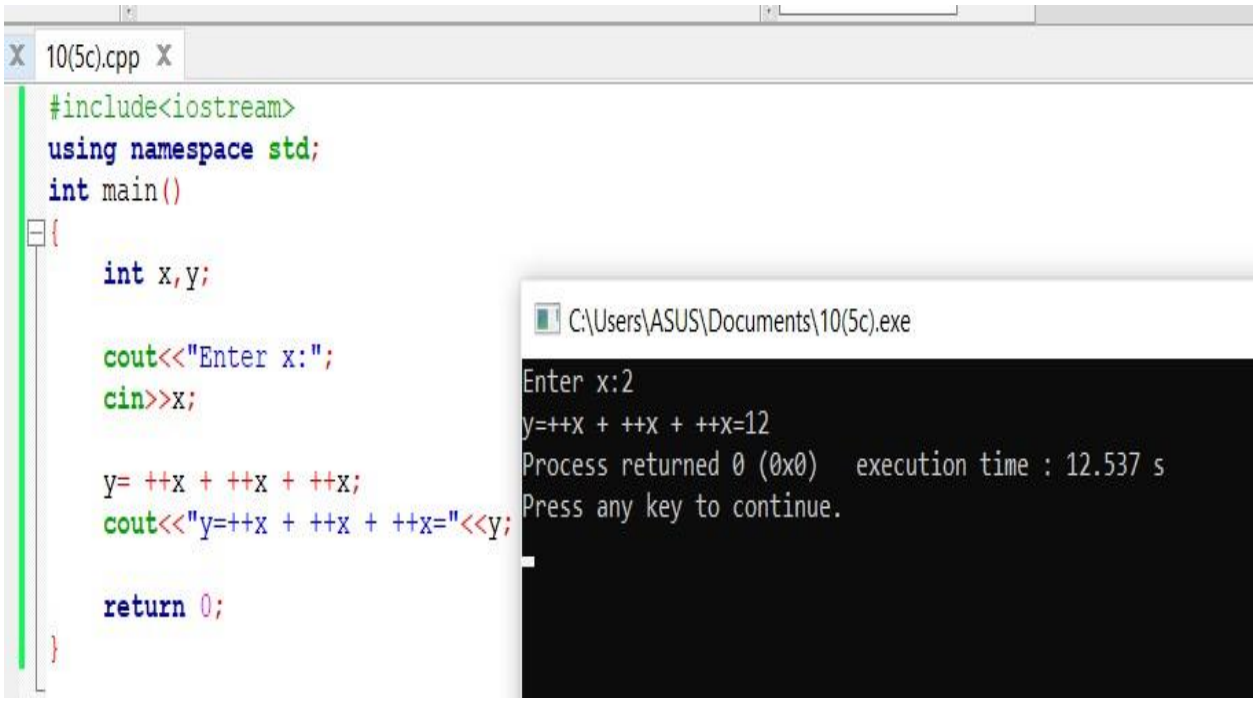


5(c) Here, y=++x + ++x + ++x;

Code :

```
#include<iostream> using
namespace std;
int main() {
   int x,y;

   cout<<"Enter x:";
cin>>x;

   y= ++x + ++x + ++x;
   cout<<"y=++x + ++x + ++x="<<y;

   return 0;
}
```

Code :

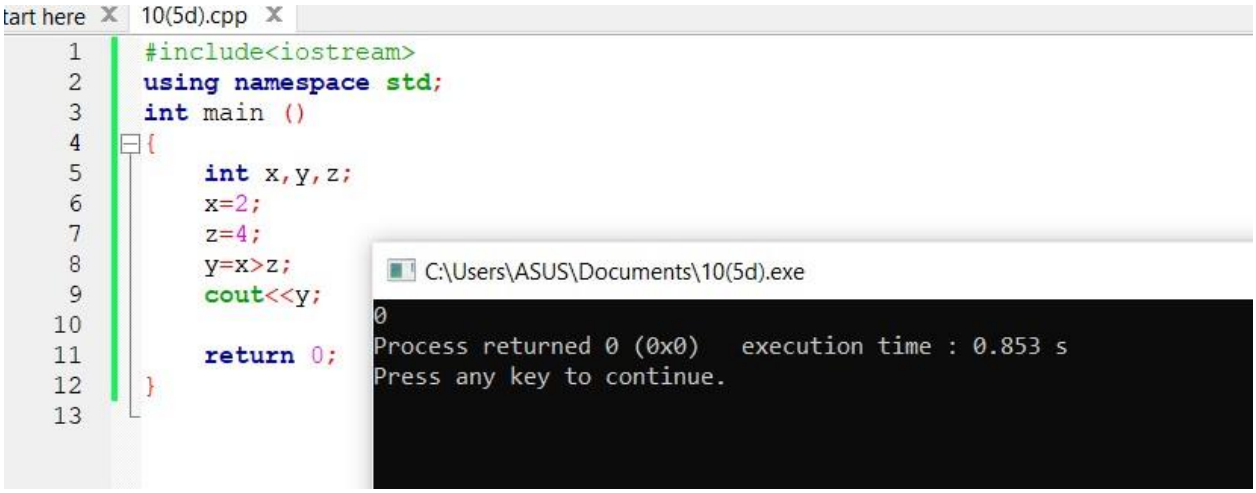


5(d)**.Print the value of y for given x=2 and z=4 and analyze the output.**
Here, y=x>z

Code :

```
#include<iostream>
 using namespace std;
int main ()
{
int x,y,z;
x=2;
z=4;
y=x>z;
   cout<<y;

   return 0;
}
```

Result :

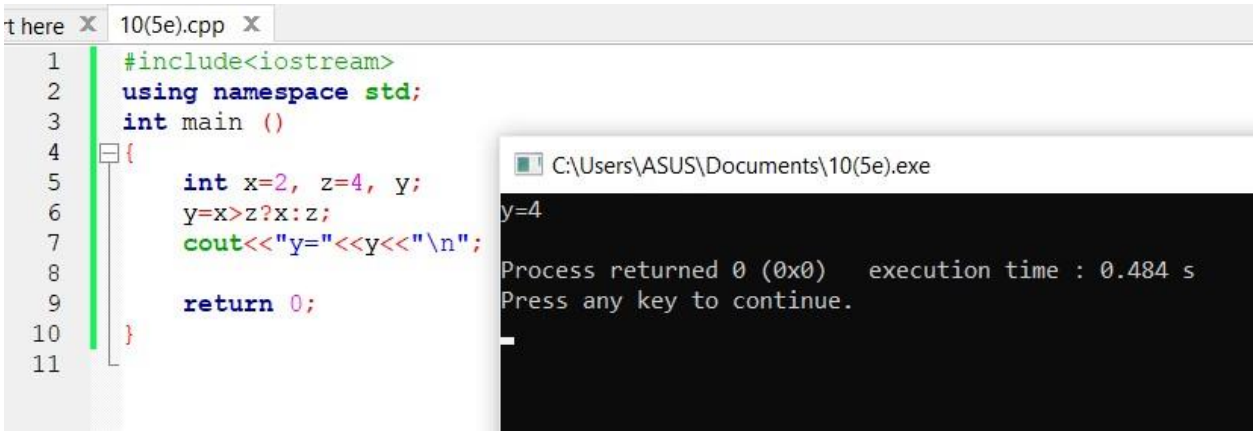


5(e**). Print the value of y for given x=2 and z=4 and analyze the output.**
Here, y=x>z? x : z;

Code :

```
#include<iostream>
using namespace std;
int main ()
{
  int x=2, z=4, y;
y=x>z?x:z;
   cout<<"y="<<y<<"\n";

   return 0;
}
```

Result :

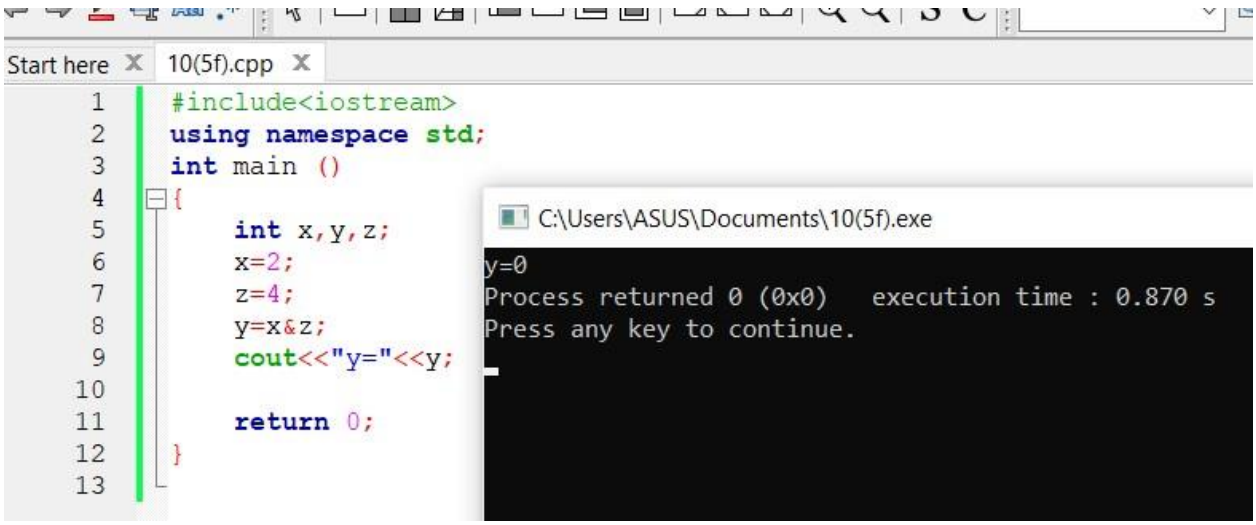


5(f) Here, y=x & z;

Code :

```
#include<iostream>
using namespace std;
int main ()
{
  int x,y,z;
 x=2;
 z=4;
 y=x&z;
cout<<"y="<<y;

   return 0;
}
```

Result :



5(g) Here, y=x>>2+z<<1;

Code :

```
#include<iostream>
 using namespace std;
int main ()
{
 int x,y,z;
x=2;
   z=4;
y=(x>>2)+(z<<1);
   cout<<"y="<<y;

   return 0;
}
```

Result :