



Fundamentals of Object Oriented Programming

CSN- 103

Dr. R. Balasubramanian

Associate Professor

Department of Computer Science and Engineering

Indian Institute of Technology Roorkee

Roorkee 247 667

balarfcs@iitr.ac.in

<https://sites.google.com/site/balaiiitr/>



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new code

</> enter your source code or insert [template](#) or [sample](#) or [your template](#)

```
1 ▾ /* package whatever; // don't place package name! */
2
3 import java.util.*;
4 import java.lang.*;
5 import java.io.*;
6
7 ▾ /* Name of the class has to be "Main" only if the class is public. */
8 class Ideone
9 {
10     public static void main (String[] args) throws java.lang.Exception
11     {
12         // your code goes here
13     }
14 }
```

Java ▴

stdin



[more options](#)

Run



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8 class Ideone
9 ▾ {
10     public static void main (String[] args) throws java.lang.Exception
11     {
12         // your code goes here
13         System.out.println("Hello World!");
14     }
15 }
```

Java ▴

stdin



[more options](#)

Run

IIT ROORKEE

 stdin

Standard input is empty

 stdout

Hello World!




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• Beginner

• Easy

• Medium

• Hard

• Challenge

• Peer

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CODE, COMPILE & RUN

IDE x +

JAVA (Javac 8)

```
1  /* package codechef; // don't place package name! */
2
3  import java.util.*;
4  import java.lang.*;
5  import java.io.*;
6  import java.util.Scanner;
7
8  /* Name of the class has to be "Main" only if the class is public. */
9  class Codechef
10 {
11     public static void main (String[] args) throws java.lang.Exception
12     {
13         // your code goes here
14         System.out.println("Hello World");
15     }
16 }
17
```

13:41

Open File ☐ Custom Input Run

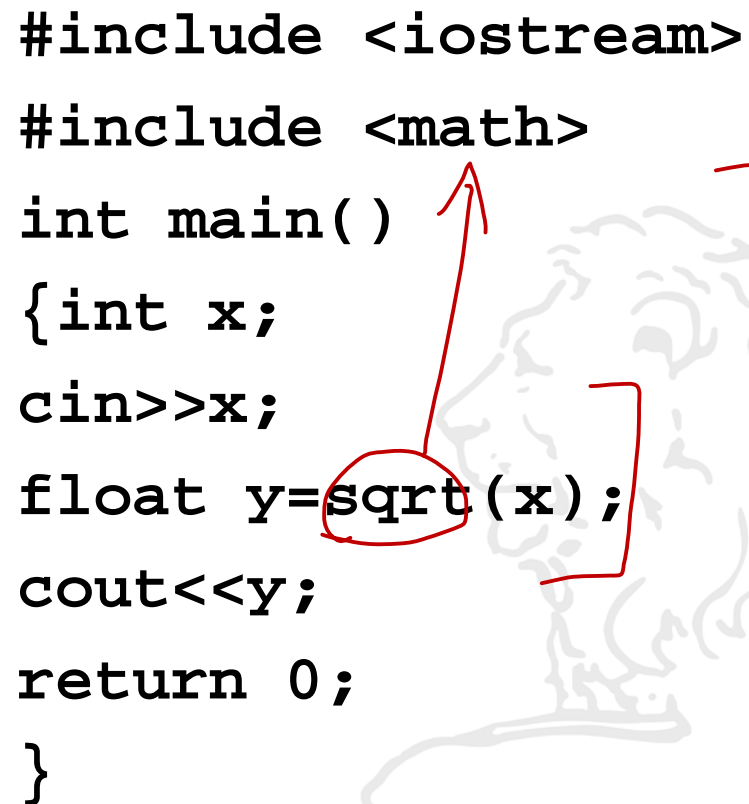
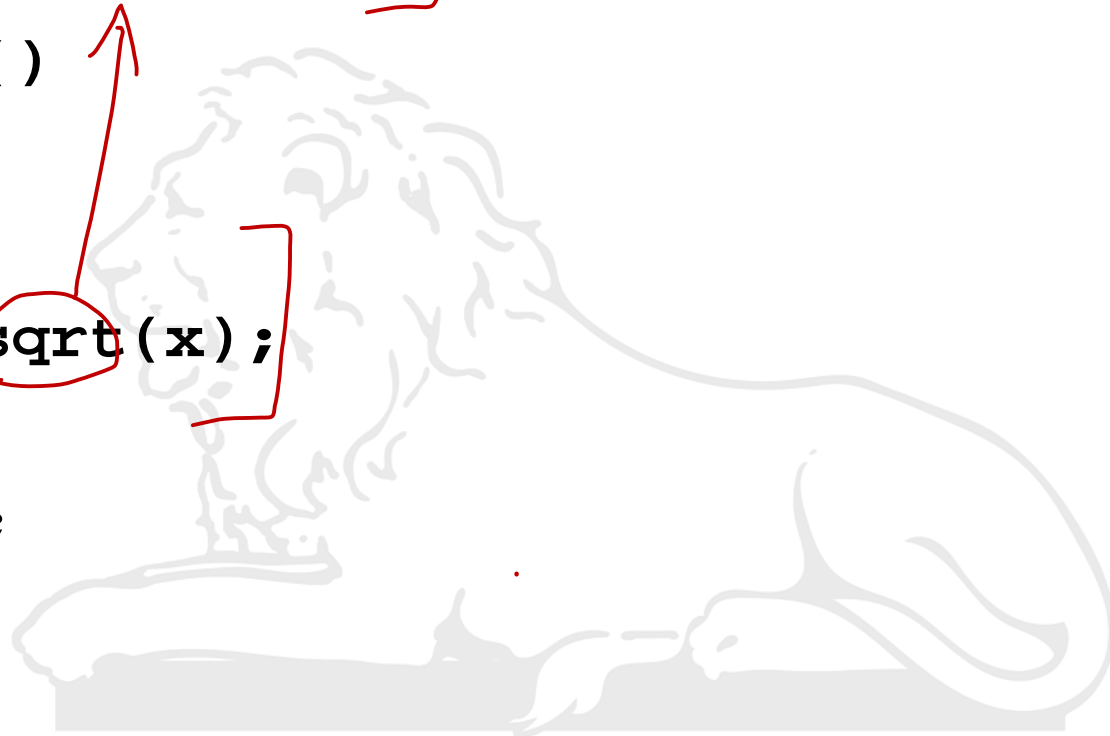
Status Successfully executed Date 2016-08-01 08:19:53 Time 0.09 sec Mem 320.32 kB

Output

Hello World

Finding Square root of a number in C++

```
#include <iostream>
#include <math>
int main()
{int x;
cin>>x;
float y=sqrt(x);
cout<<y;
return 0;
}
```

The code is annotated with red markings. A bracket groups the two include statements. An arrow points from the 'sqrt' function in the calculation line to the '<math>' header. Another bracket groups the variable declaration, input, and calculation lines.



Finding Square root of a number in JAVA

```
public class SquareRoot {  
  
    public static void main(String[] args) {  
  
        double x=100;  
        double y=Math.sqrt(x);  
        System.out.println(y);  
  
        //returns square root of 25.5  
        System.out.println(Math.sqrt(25.5));  
    }  
}
```



Finding Square root of a number in JAVA

```
1 public class SquareRoot {  
2  
3     public static void main(String[] args) {  
4  
5         double x=100;  
6         double y=Math.sqrt(x);  
7         System.out.println(y);  
8  
9         //returns square root of 25.5  
10        System.out.println(Math.sqrt(25.5));  
11    }  
12 }
```

<http://goo.gl/Mb5qM8>

Terminal

```
sh-4.3$ javac SquareRoot.java  
sh-4.3$ java SquareRoot  
10.0  
5.049752469181039  
sh-4.3$
```



```
1.  /* package whatever; // don't place package name! */
2.
3.  import java.util.*;
4.  import java.lang.*;
5.  import java.io.*;
6.
7.  /* Name of the class has to be "Main" only if the class is public. */
8.  class Ideone
9.  {
10.     public static void main (String[] args) throws java.lang.Exception
11.     {
12.         // your code goes here
13.         double x=100;
14.         double y=Math.sqrt(x);
15.         System.out.println(y);
16.
17.         //returns square root of 25.5
18.         System.out.println(Math.sqrt(25.5));
19.     }
20. }
```

Success

stdin

Standard input is empty

stdout

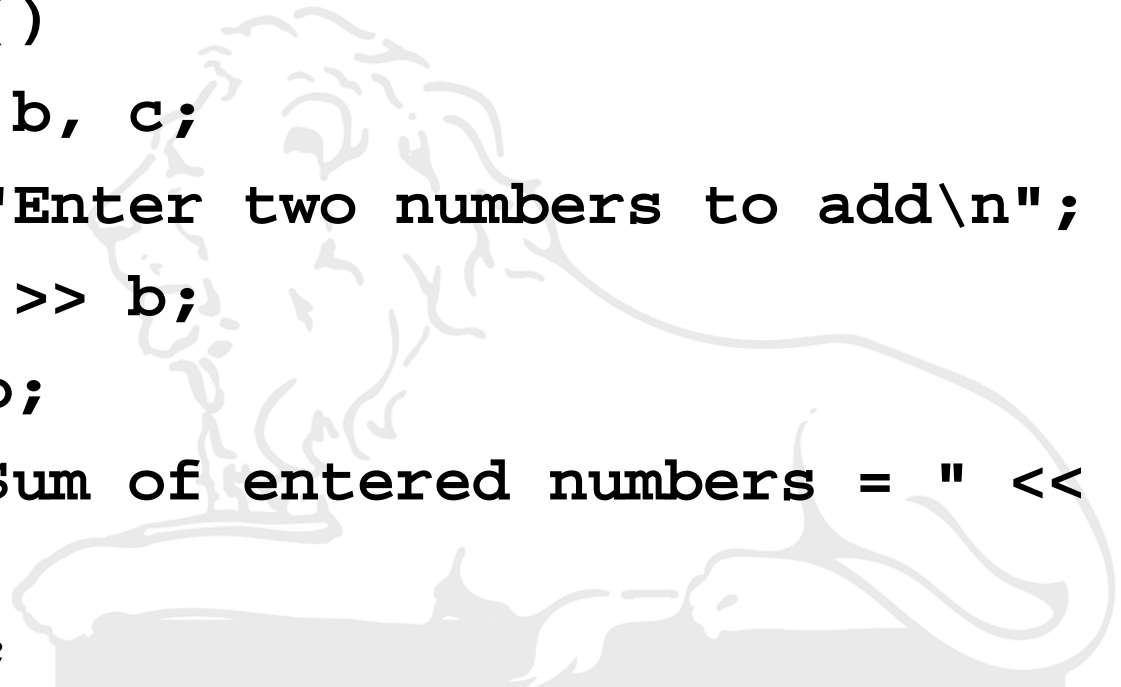
10.0

5.049752469181039

<http://ideone.com/0jJ4Uj>

Program to find the addition of Two Numbers in C++

```
#include <iostream>
using namespace std;
int main()
{ int a, b, c;
  cout << "Enter two numbers to add\n";
  cin >> a >> b;
  c = a + b;
  cout << "Sum of entered numbers = " << c <<
    endl;
  return 0;
}
```

A faint, light-colored background image of a statue, likely a historical figure, is visible behind the code text.



```
import java.util.Scanner;
class AddNumbers
{
    public static void main(String args[])
    {
        int a, b, c;
        System.out.println("Enter two integers to calculate
        their sum ");
        Scanner in = new Scanner(System.in);
        //System.in as InputStream
        a = in.nextInt();
        b = in.nextInt();
        c = a + b;
        System.out.println("Sum of entered integers = "+c);
    }
}
```

Handwritten notes:

- cin >> a;*
- cin >> b;*
- c++*
- input a*
- input b*
- Pseudo code*



*int a;
Scanner in;*

c=a+b;

c = a + b;

```
1 import java.util.Scanner;
2 class AddNumbers
3 {
4     public static void main(String args[])
5     {
6         int a, b, c;
7         System.out.println("Enter two integers to calculate their sum ");
8         Scanner in = new Scanner(System.in);
9         //System.in as InputStream
10        a = in.nextInt();
11        b = in.nextInt();
12        c = a + b;
13        System.out.println("Sum of entered integers = "+c);
14    }
15 }
16
```

Terminal

```
sh-4.3$ javac AddNumbers.java
sh-4.3$ java AddNumbers
Enter two integers to calculate their sum
20 30
Sum of entered integers = 50
sh-4.3$
```

<http://goo.gl/1tKdih>



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```
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8.  /* Name of the class has to be "Main" only if the class is public. */
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13.         int a, b, c;
14.         System.out.println("Enter two integers to calculate their sum ");
15.         Scanner in = new Scanner(System.in);
16.         //System.in as InputStream
17.         a = in.nextInt();
18.         b = in.nextInt();
19.         c = a + b;
20.         System.out.println("Sum of entered integers = "+c);
21.
22.     }
23. }
```

<http://ideone.com/FEDEaZ>

```
Success #stdin #stdout 0.13s 321344KB
```

 stdin

```
50 60
```

 stdout

```
Enter two integers to calculate their sum  
Sum of entered integers = 110
```

<http://ideone.com/FEDEaZ>



More on Scanner Class

- <http://www.cs.utexas.edu/users/ndale/Scanner.html>