# **Basic C++ Programs Assignment**

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## Task.1 Write a C++ program to print the following lines:

## You are 10 years old. You are too young to play the game (Hint use an int variable for age).

#include<iostream>

*// write a program to input two lines*.

using namespace std;

int main(){

int x = 10; //declaring an integer variable

cout << "You are "<<x<<"years old."<<endl *//using it and completing tasks*

<<"You are too young to play the game."<<endl; *//completing task*

return 0;

} *//task completed*

**Task.2 Write a program in C++ to print the sum of two numbers.**Sample Output:  
 -----------------------------------  
The sum of 29 and 30 is : 59

#include<iostream>

*//sum of two numbers and result in string as going to be*

using namespace std;

int main(){

int num1= 29, num2 = 30, sum = num1 + num2; *//declaring and assigning three variables*

cout << "The sum of "<< num1 << " and "<<num2<<"is: "<<sum<<endl; //output

return 0 ;

}*//task completed*

**Task.3 Write a program in C++ to find Size of fundamental data types.**

#include<iostream>

#include<conio.h>

using namespace std;

int main(){

string x;

cout << "Give the name of data type you want to know the size of: ";

cin >>x;

if(x == "char"){

cout <<"Size of "<<x<<" is: "<<sizeof(char)<<endl; *//size of char(1)*

}

else if(x == "int"){

cout <<"Size of "<<x<<" is: "<<sizeof(int)<<endl; *//size of int(4)*

}

else if(x == "long"){

cout <<"Size of "<<x<<" is: "<<sizeof(long)<<endl; *//size of long(4)*

}

else if (x =="short"){

cout <<"Size of "<<x<<" is: "<<sizeof(short)<<endl; *//size of short(2)*

}

else if (x =="float"){

cout <<"Size of "<<x<<" is: "<<sizeof(float)<<endl; *//size of float(4)*

}

else if (x =="bool"){

cout <<"Size of "<<x<<" is: "<<sizeof(bool)<<endl; *//size of bool(1)*

}

else if(x=="double"){

cout <<"Size of "<<x<<" is: "<<sizeof(double)<<endl; *//size of double(8)*

}

else {

cout<<"Invalid Data type (at least programmer didn't put this value in it)";

}

return 0;

}

*//task completed*

### Task.4 Write a C++ program to declare an integer variable Hours and assign it a value of your choice and Convert Hours in terms of minutes.

### #include<iostream>

### using namespace std;

### int main(){

### int hours = 4; *//declaring variable and assigning value of our choice*

### int min = hours \* 60; *//converting hours in minutes*

### cout <<hours<<" hours will be equal to "<<min<<" minutes."<<endl; *//result or output*

### return 0;

### }*//task completed*

### Task. 5 Write a C++ program to declare two integers, one float variables and assign 10, 15, and 12.6 to them respectively. It then prints these values on the screen.

### #include<iostream>

### using namespace std;

### int main(){

### int a = 10, b = 15; *//two variables of integer data type*

### float c = 12.6; *//one variable of float data type*

### cout <<"first variable: "<< a<<endl<<"Second variable: "<<b<<endl<<"Third variable: " << c<<endl; *//output or result*

### return 0 ;

### } *//task completed*

**Task.6 Write three C++ statements to print the asterisk pattern as shown below.**

\*\*\*\*\*  
\*\*\*\*\*

\*\*\*\*\*

#include<iostream>

int main(){

cout<<"\*\*\*\*\*\*"<<endl

<<"\*\*\*\*\*\*"<<endl

<<"\*\*\*\*\*\*"<<endl;

return 0;

}*//task completed*

**Task**.7 **Write a program in C++ to check the upper and lower limits of integer.**

#include <iostream>

using namespace std;

int main(){

cout<<"Integer high is: "<<INT\_MAX<<endl; *//highest limit of integer*

cout<<"Integer low is: "<<INT\_MIN<<endl; *//lowest limit of integer*

return 0;

}

*//task completed*

**Task** .8 Insert the missing part of the code below to output "Hello World!".

int main() {

 << "Hello World!";

return 0;

}

*//task completed*

**Task.9** Insert a new line after "Hello World", by using a special character:

int main() {

cout << "Hello World! ";

cout << "I am learning C++";

return 0;

}

*//task completed*

**Task**.10 Comments in C++ are written with special characters. Insert the missing parts:

 This is a single-line comment

 This is a multi-line comment.



*//task completed*

**Task. 11** Fill in the missing parts to create three variables of the same type, using a **comma-separated list**:

 x = 5 y = 6 z = 50;

cout << x + y + z;

*//task completed*

**Task.12** Create a variable called z, assign x + y to it, and display the result.

int x = 5;

int y = 10;

  = x + y;

cout << ;

*//task completed*

**Task. 13** Write a program to print the following pattern:

C

i I

s s

b b

e e

s s

t s e b s i C i s b e s t

#include<iostream>

using namespace std;

int main(){

cout<<" C "<<endl

<<" i I "<<endl

<<" s s "<<endl

<<" b b "<<endl

<<" e e "<<endl

<<" s s "<<endl

<<" t s e b s i C i s b e s t "<<endl;

return 0;

}*//task completed*

#include<iostream>

#include<iomanip>

using namespace std;

int main(){

cout<<setw(22)<<'C'<<setw(17)<<endl<<setw(18)<<'i'<<setw(7)<<'I'<<endl

<<setw(16)<<'s'<<setw(9)<<'s'<<endl<<setw(14)<<'b'<<setw(12)<<'B'<<endl

<<setw(12)<<'e'<<setw(12)<<'e'<<setw(11)<<endl<<setw(10)<<'s'<<setw(14)<<'s'<<setw(10)<<endl;

return 0;

}