NAME: Muhammad Rohab Khan

**SAP ID: 70180708**

**SECTION 1-E**

**#include <iostream> // this is used to indicate input and output**

**#include <string>**

**using namespace std;**

**// name : Muhammad Rohab Khan**

**// section 1-E**

**// section A**

**int main(){**

**cout<< "hello";**

**return 0; // this indicate that the programm has been succesfully executed to the operating system**

**}**

**// section B**

**// variable and data type**

**int main(){**

**int age =20;**

**float height =6.2;**

**double weight= 75.6;**

**char letter = 'r';**

**bool checking= true;**

**cout<<"age "<<age<<endl;**

**cout<<"height "<<height<<endl;**

**cout<<"weight "<< weight<<endl;**

**cout<<"letter "<< letter<<endl;**

**cout<<"checking "<<checking<<endl;**

**}**

**// data types**

**// int vs float**

**// int is used to store integers like 1,2,3 and -1,-2,-3etc**

**// float deals with the decimal point numbers like 6.7**

**// char is used to store a single character**

**// string is used to store full sentence or a word**

**// boolean values stores true or false**

**// section c**

**int main(){**

**string name;**

**int age;**

**char letter;**

**cout<< "enter your name "<< endl;**

**cin>> name;**

**cout<< "enter your age? "<< endl;**

**cin>> age;**

**cout<<"what's your favorite character ? "<< endl;**

**cin>> letter;**

**cout<< "hello "<< name<<"! "<< "you are "<< age <<" old " <<"and your favorite letter is "<<letter;**

**return 0;**

**}**

**// section d**

**// arthematic program**

**int main(){**

**float a,b;**

**cout<< "enter the first number ";**

**cin>> a;**

**cout<< "enter the second number ";**

**cin>> b;**

**// performing the arthematic expression**

**cout<< "sum is = ";**

**cout<< a+b<< endl;**

**cout<< "product is = ";**

**cout<< a\*b<< endl;**

**cout<< "difference is = ";**

**cout<< a-b<<endl;**

**cout<< "divide is = ";**

**cout<< a/b <<endl;**

**return 0;**

**}**

**// if we divide an integer by another integer the answer will be integers**

**// if we divide any number by 0 the result will be error !**

**// bonus section**

**//challenge 1**

**int main() {**

**const float pi = 3.14;**

**cout << "The value of PI is " << pi << endl;**

**return 0;**

**}**

**// challenge 2**

**int main() {**

**string name = "Taha";**

**string greeting = "Hello," + name;**

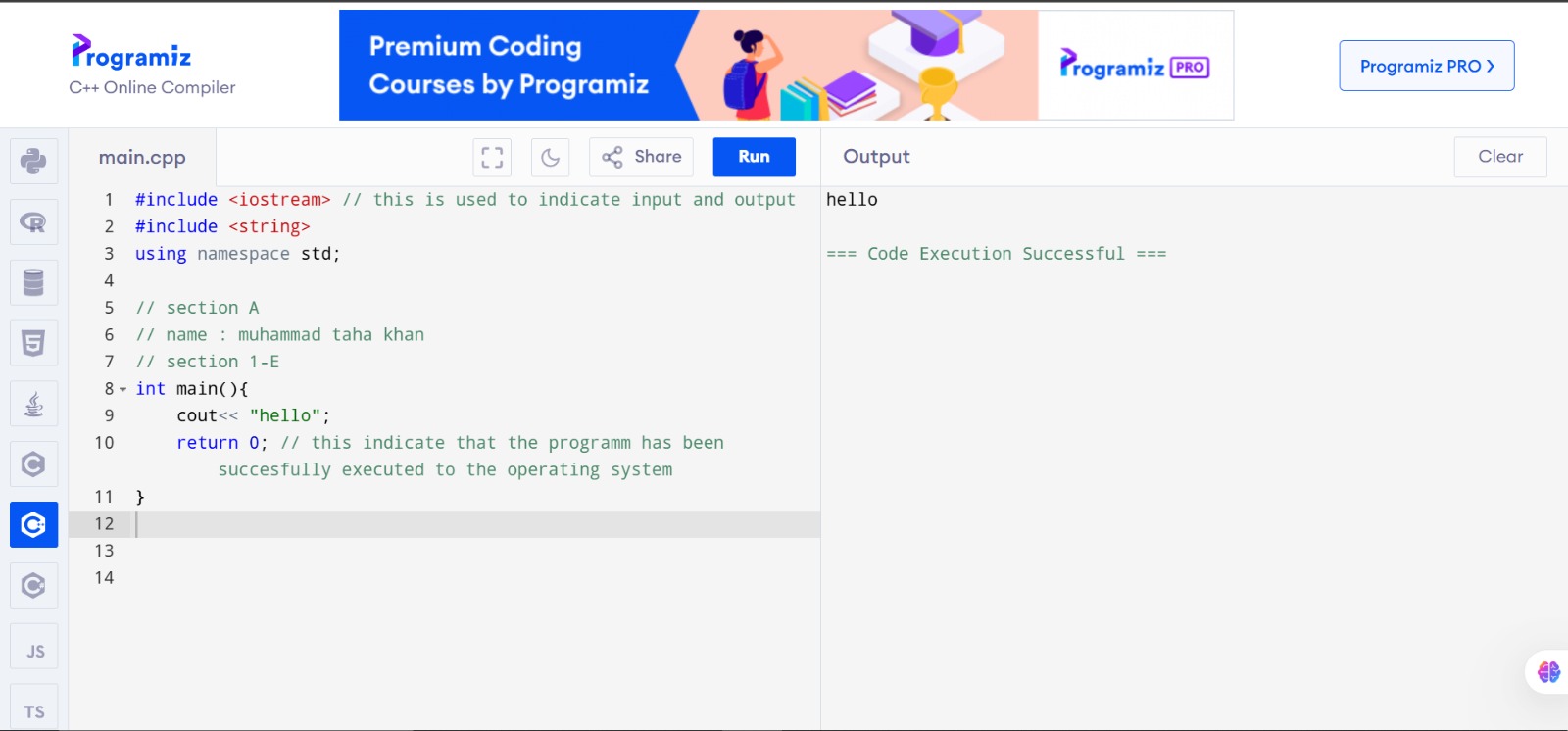
**cout << greeting << endl;**

**return 0;**

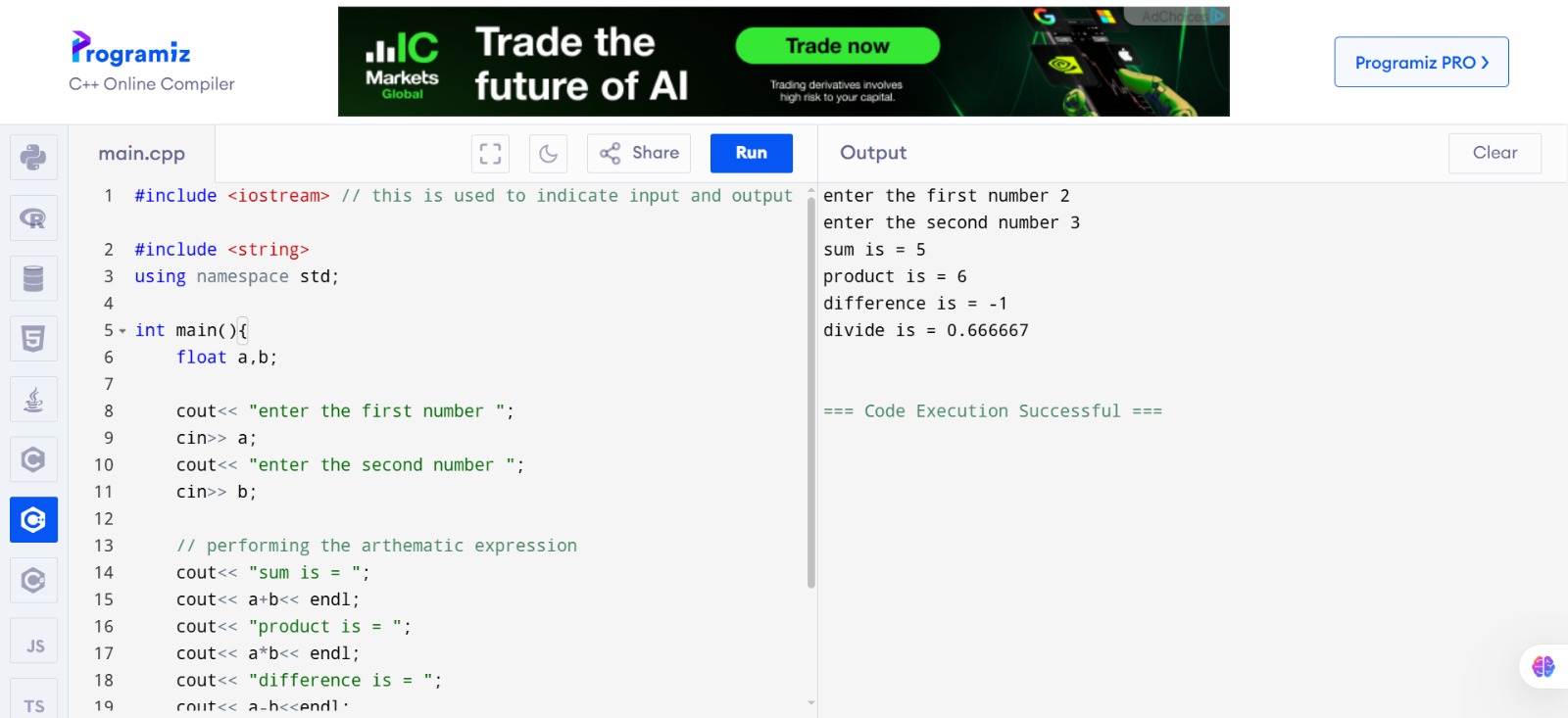
**}**

**// const is means constant means it values cannot be changed after.**

**// no we cannot change the value for constant type as it is constant if we try to do so it will result in error**

****

****

****