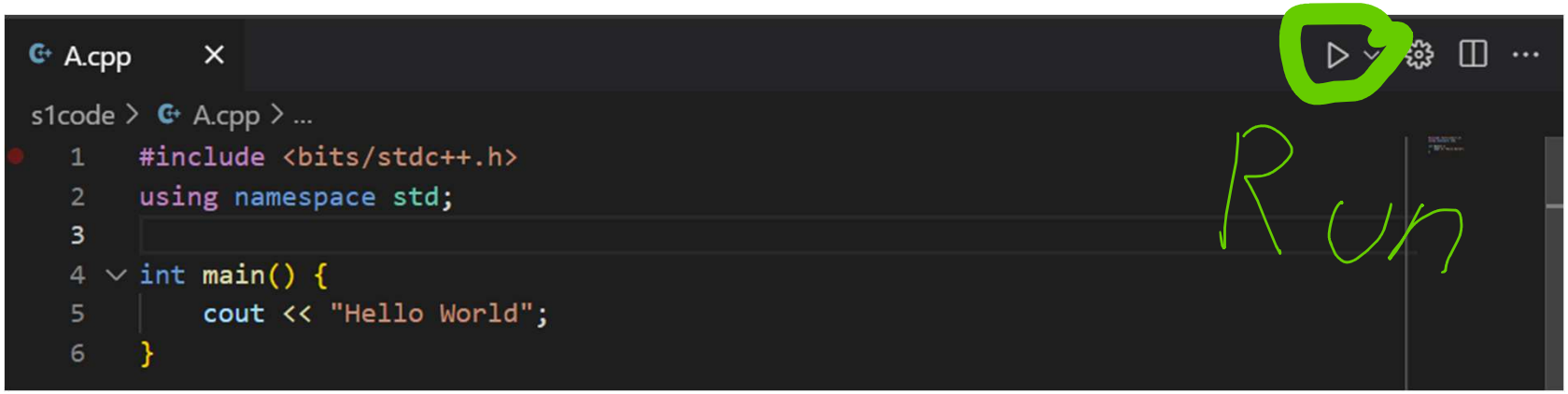
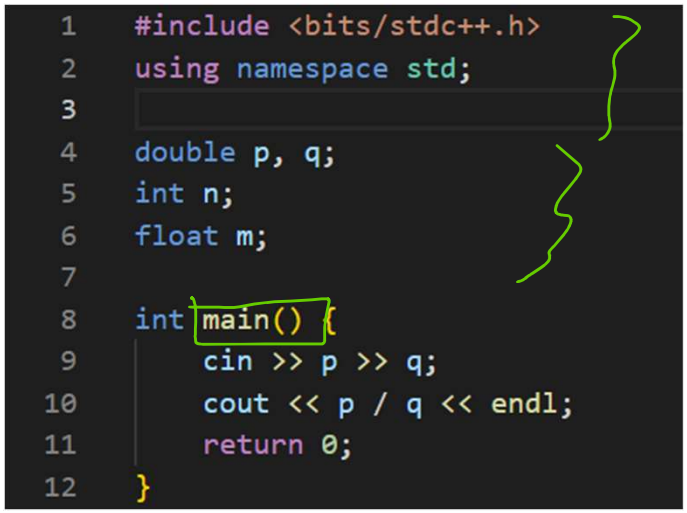
Basic C++

VSCode, C++, Python

1. Codeforce
2. Run code



Cấu trúc chương trình



```cpp
#include <bits/stdc++.h>
using namespace std;

double p, q;
int n;
float m;

int main() {
    cin >> p >> q;
    cout << p / q << endl;
    return 0;
}
```

Khai báo thư viện

Khai báo biến toàn cục, khai báo hàm

Hàm chính

cin, cout

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```

Basic variables type

- int, long long, short
- float, double
- Char – ascii
- Bool
- string

```
int row, column;
double temperature;
row = 1;
column = 2;
temperature = 3.0;
```

```
bool flag1, flag2;
flag1 = true;
flag2 = false;
```

```
int row = 1, column = 2;
double temperature = 3.0;
```

```
char letter;
letter = 'a';
```

```
string city;
city = "Oxford";
```

Operator

- +
- -
- *
- /
- %

1

1.2 Write code that asks a user to enter two integers from the keyboard and then writes the product of these integers to the screen.

1.5 Write code that invites the user to input separately strings that store their given name and their family name. Print the user's full name to screen.

Array

```
int array1[2];
double array2[2][3];
```

2

1.3 Write code that declares two vectors as arrays of double precision floating point numbers of length 3 and assigns values to each of the entries. Extend this code so that it calculates the scalar (dot) product of these vectors and prints it to screen. Finally, extend the code so that it prints the Euclidean norm of both vectors to screen.

Khai báo 2 vector 3 chiều bằng 2 mảng, gán giá trị ban đầu
Tính tích vô hướng -> in ra màn hình
Tính độ dài của 2 vector -> cout

Câu lệnh rẽ nhánh, vòng lặp

```
if (p > q)
{
   Statement1;
   Statement2;
}
```

Bắt đầu; điều kiện tiếp tục; kết thúc 1 vòng

```
for (int i=0; i<10; i++)
{
   std::cout << i << " ";
}
```