

G+ 4.1.c++



G+ 4.2.c++

G+ 4.3.c++

.vscode > G+ 4.1.c++

```
1  #include<iostream>
2  using namespace std;
3  int main()
4  {
5      int a, b;
6      cin >> a >> b;
7      cout << a << " + " << b << " = " << a + b << "\n";
8      cout << a << " - " << b << " = " << a - b << "\n";
9      cout << a << " / " << b << " = " << a / b << "\n";
10     cout << a << " * " << b << " = " << a * b << "\n";
11     return 0;
12 }
13
```

PROBLEMS

OUTPUT

DEBUG CONSOLE

TERMINAL

PORTS

gdb.exe' '--interpreter=mi'

12

3

12 + 3 = 15

12 - 3 = 9

12 / 3 = 4

12 * 3 = 36

PS D:\cis cs>

4.2.c++ X

.vscode > 4.2.c++

```
1 #include<iostream>
2 using namespace std;
3 int main()
4 {
5     string name1;
6     cout<<"What is student 1 name: ";
7     cin>>name1;
8     string id1;
9     cout<<"His id: ";
10    cin>>id1;
11    double grade1;
12    cout<<"His math exam grade: ";
13    cin>>grade1;
14    string name2;
15    cout<<"What is student 2 name: ";
16    cin>>name2;
17    string id2;
18    cout<<"His id: ";
19    cin>>id2;
20    double grade2;
21    cout<<"His math exam grade: ";
22    cin>>grade2;
23    cout<<"\nStudents grades in math\n";
24    cout<<name1<<" (with id "<<id1<<" ) got grade: "<<grade1<<"\n";
25    cout<<name2<<" (with id "<<id2<<" ) got grade: "<<grade2<<"\n";
26    cout<<"Average grade is "<<(grade1 + grade2) / 2.0<<"\n";
27
28    return 0;
```

PROBLEMS

OUTPUT

DEBUG CONSOLE

TERMINAL

PORTS

His id: 555

His math exam grade: 30

Students grades in math

mostafa (with id 111) got grade: 20

Ali (with id 555) got grade: 30

Average grade is 25

PS D:\cis cs> |

4.03.c++ X

4.03.c++ > main()

```
1  #include<iostream>
2  using namespace std;
3  int main()
4  {
5      int even1, even2, even3, even4;
6      int odd1, odd2, odd3, odd4;
7      cin>>odd1>>even1;
8      cin>>odd2>>even2;
9      cin>>odd3>>even3;
10     cin>>odd4>>even4;
11     int even_sum = even1 + even2 + even3 + even4;
12     int odd_sum = odd1 + odd2 + odd3 + odd4;
13     cout<<even_sum<<" "<<odd_sum<<"\n";
14     return 0;
15 }
```

PROBLEMS

OUTPUT

DEBUG CONSOLE

TERMINAL

PORTS

3

4

5

6

7

8

20 16

PS D:\cis cs>

```

1  #include<iostream>
2  using namespace std;
3  int main()
4  {
5      int num1, num2, num3;
6      num1 = 0, num2 = 1, num3 = num1 + num2, cout <<num3<<"\n";
7      num1 = num2, num2 = num3, num3 = num1 + num2, cout <<num3<<"\n";
8      num1 = num2, num2 = num3, num3 = num1 + num2, cout <<num3<<"\n";
9      num1 = num2, num2 = num3, num3 = num1 + num2, cout <<num3<<"\n";
10     num1 = num2, num2 = num3, num3 = num1 + num2, cout <<num3<<"\n";
11     num1 = num2, num2 = num3, num3 = num1 + num2, cout <<num3<<"\n";
12     num1 = num2, num2 = num3, num3 = num1 + num2, cout <<num3<<"\n";
13     num1 = num2, num2 = num3, num3 = num1 + num2, cout <<num3<<"\n";
14     num1 = num2, num2 = num3, num3 = num1 + num2, cout <<num3<<"\n";
15     return 0;
16 }

```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

.02u' '--dbgExe=C:\msys64\ucrt64\bin\gdb.exe' '--interpreter=mi'

1
2
3
5
8
13
21
34
55

PS D:\cis cs> █

```

1  #include<iostream>
2  using namespace std;
3  ✓ int main()
4  {
5      int num = 0;
6      ++num;
7      num *= 10;
8      num += 2;
9      num = num * 10;
10     num += 3;
11     num = num * 10 + 4;
12     num = 5 + num * 10;
13     num = (num * 10 + 6) * 10 + 7;
14     num = 5 * num * 2 * 1 + 5 + 2 + 1;
15     cout<<num<<"\n";
16     return 0;
17 }

```

PROBLEMS

OUTPUT

DEBUG CONSOLE

TERMINAL

PORTS

```

ne-In-u35bkqzp.j2u' '--stdout=Microsoft-MIEngine-Out-t3ou
.1cb' '--dbgExe=C:\msys64\ucrt64\bin\gdb.exe' '--interpre
12345678

```

```

PS D:\cis cs> 

```

```
1  #include<iostream>
2  using namespace std;
3  int main()
4  {
5      int num1, num2, num3;
6      cin>>num1>>num2;
7      num3 = num2;
8      num2 = num1;
9      num1 = num3;
10     cout<<num1<<" "<<num2<<endl;
11     return 0;
12 }
```

PROBLEMS

OUTPUT

DEBUG CONSOLE

TERMINAL

PORTS

.ji5' '--dbgExe=C:\msys64\ucrt64\bin\gdb.exe' '--int

231

7

7 231

PS D:\cis cs> █

```

1  #include<iostream>
2  using namespace std;
3  int main()
4  {
5      int num1, num2, num3, temp = -1;
6      cin>>num1>>num2>>num3;
7      temp = num2;
8      num2 = num1;
9      num1 = temp;
10     temp = num3;
11     num3 = num2;
12     num2 = temp;
13     cout<<num1<<" "<<num2<<" "<<num3<<"\n";
14     cin>>num1>>num2>>num3;
15     temp = num1;
16     num1 = num2;
17     num2 = num3;
18     num3 = temp;
19     cout<<num1<<" "<<num2<<" "<<num3<<"\n";
20     return 0;
21 }

```

PROBLEMS

OUTPUT

DEBUG CONSOLE

TERMINAL

PORTS

```

.gnk' '--dbgExe=C:\msys64\ucrt64\bin\gdb.exe' '--inter
115
20
301
20 301 115

```

```
1  #include<iostream>
2  using namespace std;
3  int main()
4  {
5      int a, b;
6      cin >> a >> b;
7      int equ_is_1 = a * a;
8      int equ_is_neg_1 = 2 * a + 1;
9      int is_1 = (b + 1) / 2;
10     int is_neg_1 = 1 - is_1;
11     cout<<is_1 * equ_is_1 + is_neg_1 * equ_is_neg_1;
12     return 0;
13 }
```

```
1  #include<iostream>
2  using namespace std;
3  int main()
4  {
5      int n;
6      |
7      cin >> n;
8
9      cout<< n * (n+1) / 2;
10
11     return 0;
12 }
```