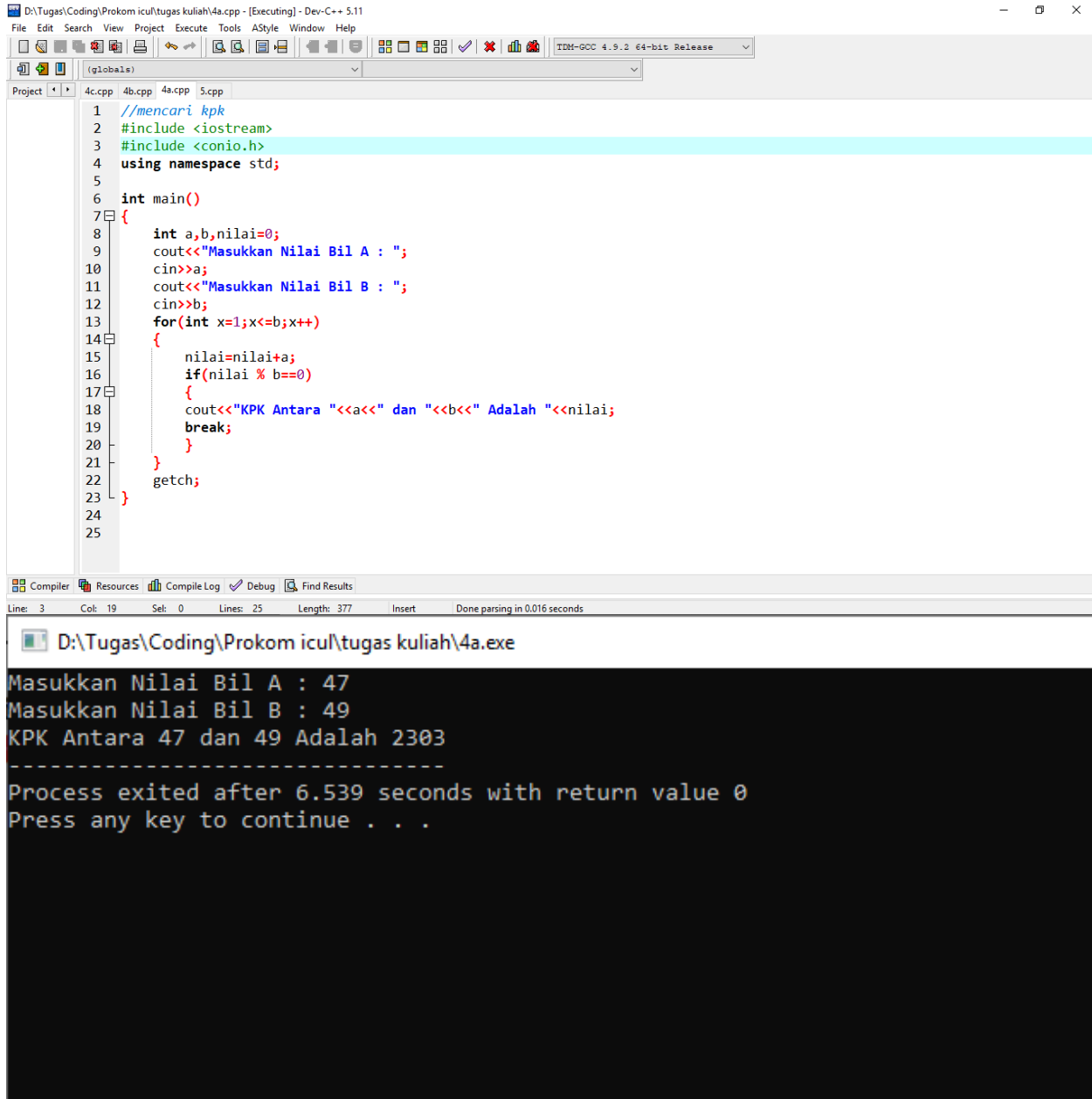


1. Buat program penentuan nilai kpk!



The image shows a screenshot of a C++ program being developed and executed in Dev-C++.

Source Code (4a.cpp):

```
1 //mencari kpk
2 #include <iostream>
3 #include <conio.h>
4 using namespace std;
5
6 int main()
7 {
8     int a,b,nilai=0;
9     cout<<"Masukkan Nilai Bil A : ";
10    cin>>a;
11    cout<<"Masukkan Nilai Bil B : ";
12    cin>>b;
13    for(int x=1;x<=b;x++)
14    {
15        nilai=nilai+a;
16        if(nilai % b==0)
17        {
18            cout<<"KPK Antara "<<a<<" dan "<<b<<" Adalah "<<nilai;
19            break;
20        }
21    }
22    getch;
23 }
24
25
```

Execution Output:

```
D:\Tugas\Coding\Prokom icul\tugas kuliah\4a.exe
Masukkan Nilai Bil A : 47
Masukkan Nilai Bil B : 49
KPK Antara 47 dan 49 Adalah 2303
-----
Process exited after 6.539 seconds with return value 0
Press any key to continue . . .
```

2. Hitunglah nilai faktorial sebuah bilangan bulat positif, bila rumus untuk faktorial adalah : $n! = n \cdot (n-1) \cdot \dots \cdot 1$.

Contoh : $3! = 3 \cdot 2 \cdot 1 = 6$

```

1 //Program faktorial
2 #include <iostream>
3 #include <iomanip>
4 using namespace std;
5 int main ()
6 {
7     int i,faktorial,batas;
8     cout<<"Masukan nilai faktorial = ";cin>>batas;
9     i=1;faktorial=1;
10    while(i<=batas)
11    {
12        faktorial*=i;
13        i++;
14    }
15    cout<<"Hasil faktorial = "<<faktorial;
16    return 0;
17 }
  
```

Compilation results...

```

- Errors: 0
- Warnings: 0
- Output Filename: D:\Tugas\Coding\Prokom icul\tugas kuliah\4b.exe
- Output Size: 1.83242321014404 MiB
- Compilation Time: 8.11s
  
```

```

D:\Tugas\Coding\Prokom icul\tugas kuliah\4b.exe
Masukan nilai faktorial = 7
Hasil faktorial = 5040
-----
Process exited after 3.759 seconds with return value 0
Press any key to continue . . .
  
```

3. Buat program untuk menampilkan keluaran sebagai berikut

1							
2	4						
3	6	9					
4	8	12	16				
5	10	15	20	25			
6	12	18	24	30	36		
7	14	21	28	35	42	49	
8	16	24	32	40	48	56	64

The image shows a C++ IDE window titled "D:\Tugas\Coding\Prokom icul\tugas kuliah\4c.cpp - Dev-C++ 5.11". The code in the editor is as follows:

```
1 #include <iostream>
2 #include <iomanip>
3 using namespace std;
4
5 int main()
6 {
7     int i,j,k,n;
8     cout<<"Masukan nilai batas = ";cin>>n;
9     for(i=1;i<=n;i++)
10    {
11
12        for(j=1;j<=i;j++)
13        {
14            k=i*j;
15            cout<<setw(4)<<k;|
16        }
17        cout<<endl;
18    }
19    return 0;
20 }
```

The IDE's "Compiler" tab shows the following compilation results:

```
Compilation results...
- Errors: 0
- Warnings: 0
- Output Filename: D:\Tugas\Coding\Prokom icul\tugas kuliah\4c.exe
- Output Size: 1.83279037475586 MiB
- Compilation Time: 1.14s
```

The execution output window shows the program's runtime behavior:

```
D:\Tugas\Coding\Prokom icul\tugas kuliah\4c.exe
Masukan nilai batas = 8
1
2  4
3  6  9
4  8 12 16
5 10 15 20 25
6 12 18 24 30 36
7 14 21 28 35 42 49
8 16 24 32 40 48 56 64

-----
Process exited after 1.209 seconds with return value 0
Press any key to continue . . .
```