

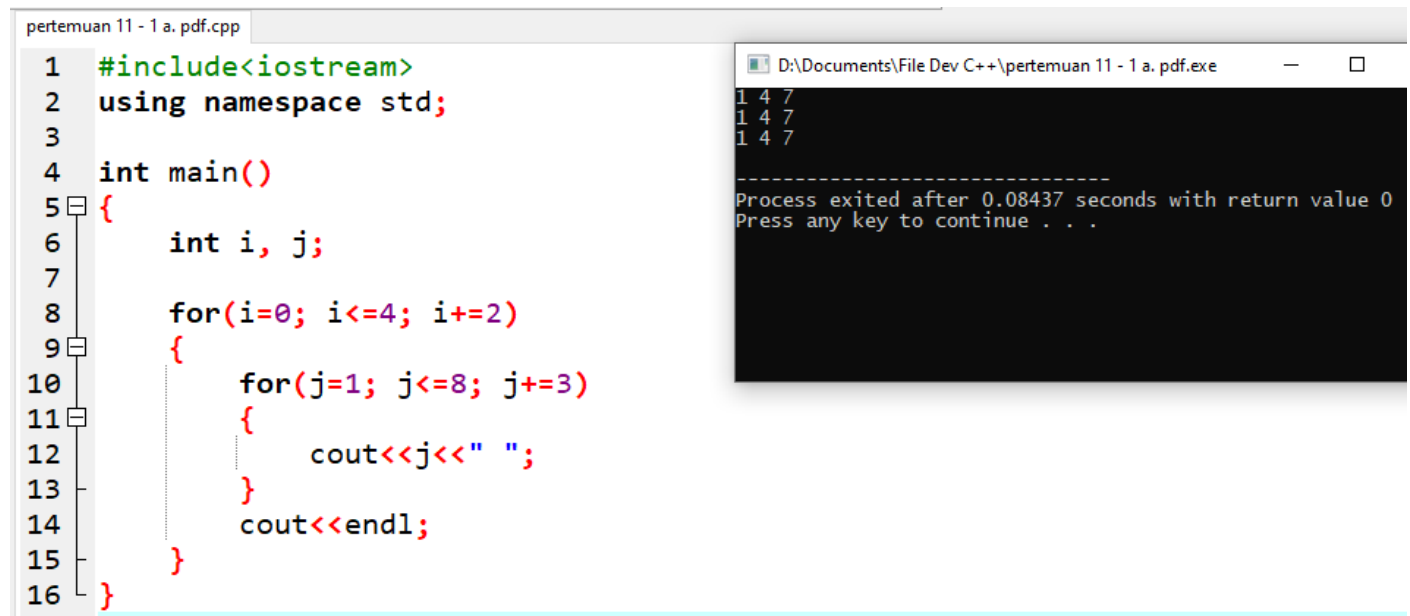
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Kelas : TPLP023

Tugas : Algoritma & Pemrograman Pertemuan 11 – Tugas Mandiri

1. a.



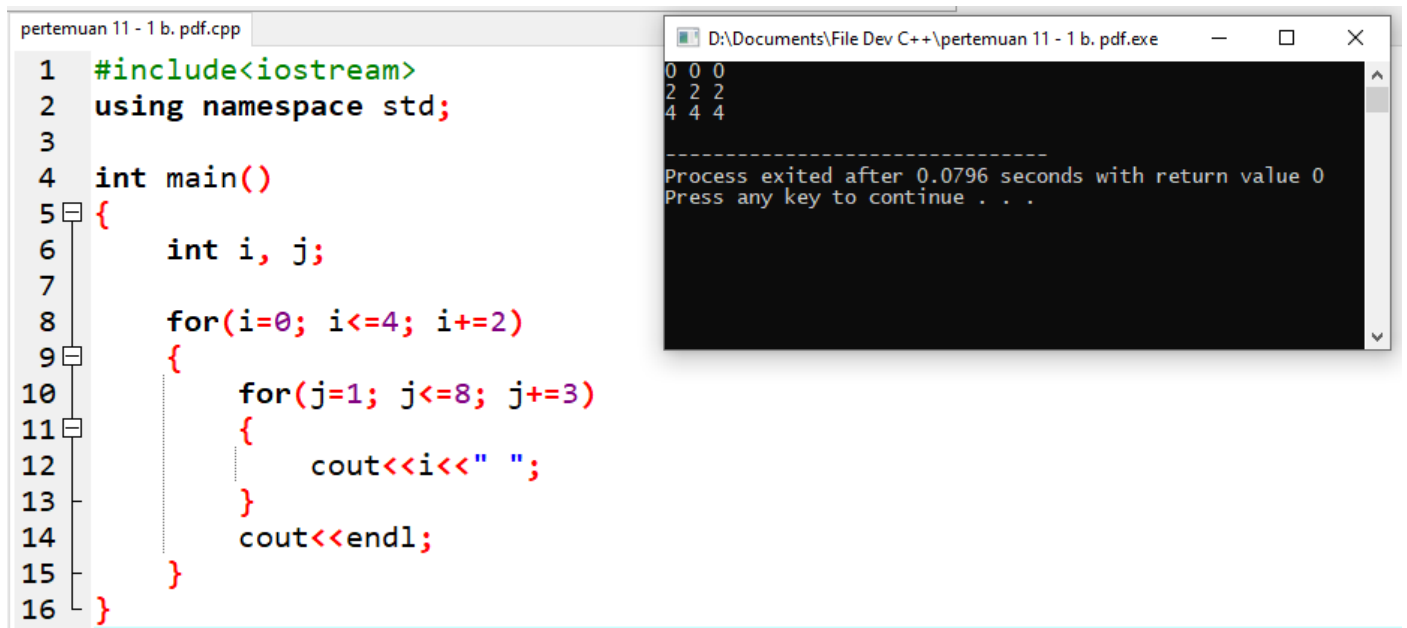
The screenshot shows a C++ program in a text editor and its execution in a command prompt. The program uses nested loops to print the value of 'j' for each value of 'i'. The output shows three rows of values: 1, 4, 7 for i=0; 1, 4, 7 for i=2; and 1, 4, 7 for i=4.

```
pertemuan 11 - 1 a. pdf.cpp
1  #include<iostream>
2  using namespace std;
3
4  int main()
5  {
6      int i, j;
7
8      for(i=0; i<=4; i+=2)
9      {
10         for(j=1; j<=8; j+=3)
11         {
12             cout<<j<<" ";
13         }
14         cout<<endl;
15     }
16 }
```

```
D:\Documents\File Dev C++\pertemuan 11 - 1 a. pdf.exe
1 4 7
1 4 7
1 4 7
-----
Process exited after 0.08437 seconds with return value 0
Press any key to continue . . .
```

I	J
1	1
	4
	7
4	1
	4
	7
7	1
	4
	7

1. b.



The screenshot shows a C++ IDE with two windows. The left window, titled 'pertemuan 11 - 1 b. pdf.cpp', contains the following code:

```
1 #include<iostream>
2 using namespace std;
3
4 int main()
5 {
6     int i, j;
7
8     for(i=0; i<=4; i+=2)
9     {
10         for(j=1; j<=8; j+=3)
11         {
12             cout<<i<<" ";
13         }
14         cout<<endl;
15     }
16 }
```

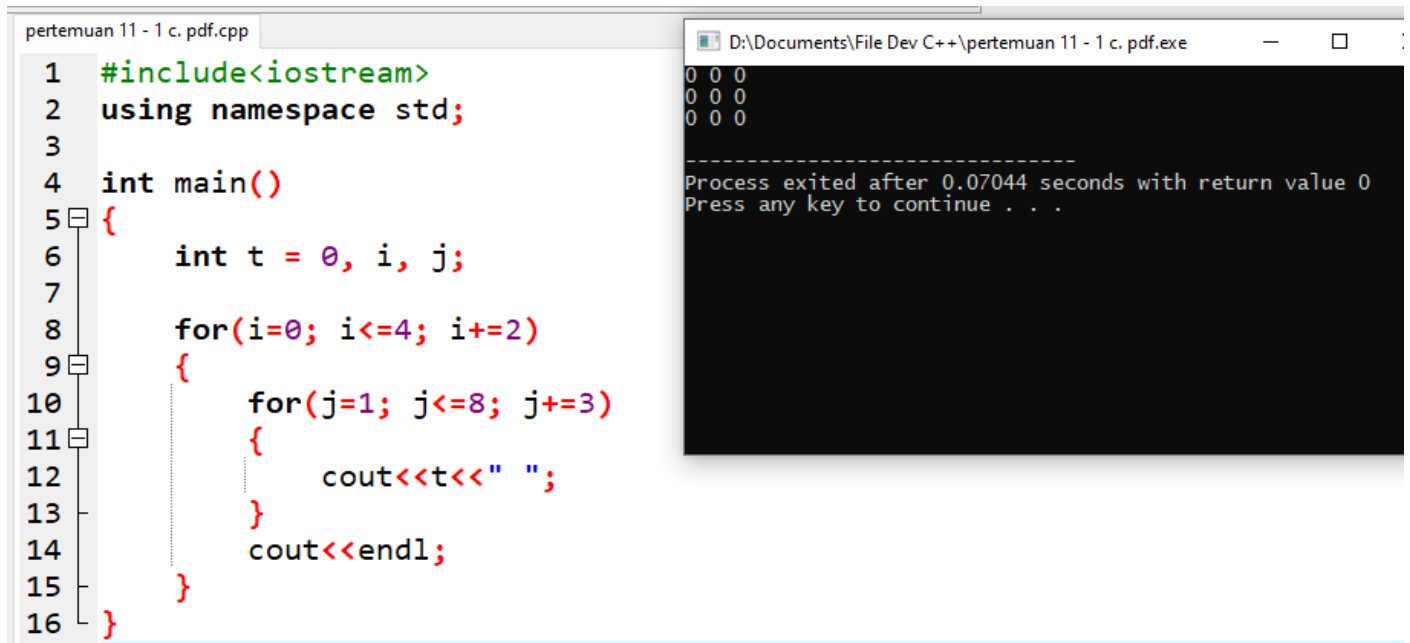
The right window, titled 'D:\Documents\File Dev C++\pertemuan 11 - 1 b. pdf.exe', shows the program's output:

```
0 0 0
2 2 2
4 4 4

-----
Process exited after 0.0796 seconds with return value 0
Press any key to continue . . .
```

I	J
0	0
	2
	4
2	0
	2
	4
4	0
	2
	4

1. c.



The screenshot shows a C++ IDE with two windows. The left window, titled 'pertemuan 11 - 1 c. pdf.cpp', contains the following code:

```
1 #include<iostream>
2 using namespace std;
3
4 int main()
5 {
6     int t = 0, i, j;
7
8     for(i=0; i<=4; i+=2)
9     {
10         for(j=1; j<=8; j+=3)
11         {
12             cout<<t<<" ";
13         }
14         cout<<endl;
15     }
16 }
```

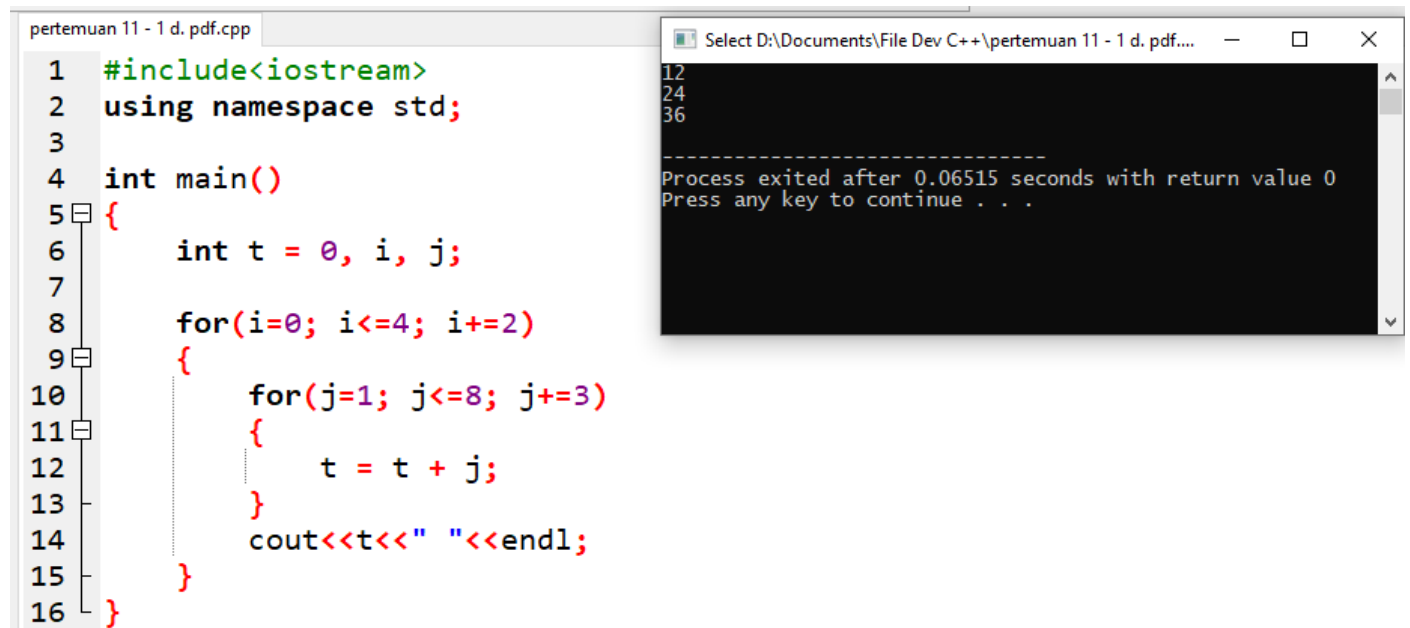
The right window, titled 'D:\Documents\File Dev C++\pertemuan 11 - 1 c. pdf.exe', shows the program's output:

```
0 0 0
0 0 0
0 0 0

-----
Process exited after 0.07044 seconds with return value 0
Press any key to continue . . .
```

I	J
0	0
	0
	0
0	0
	0
	0
0	0
	0
	0

1. d.



The screenshot shows a C++ IDE with a file named 'pertemuan 11 - 1 d. pdf.cpp'. The code is as follows:

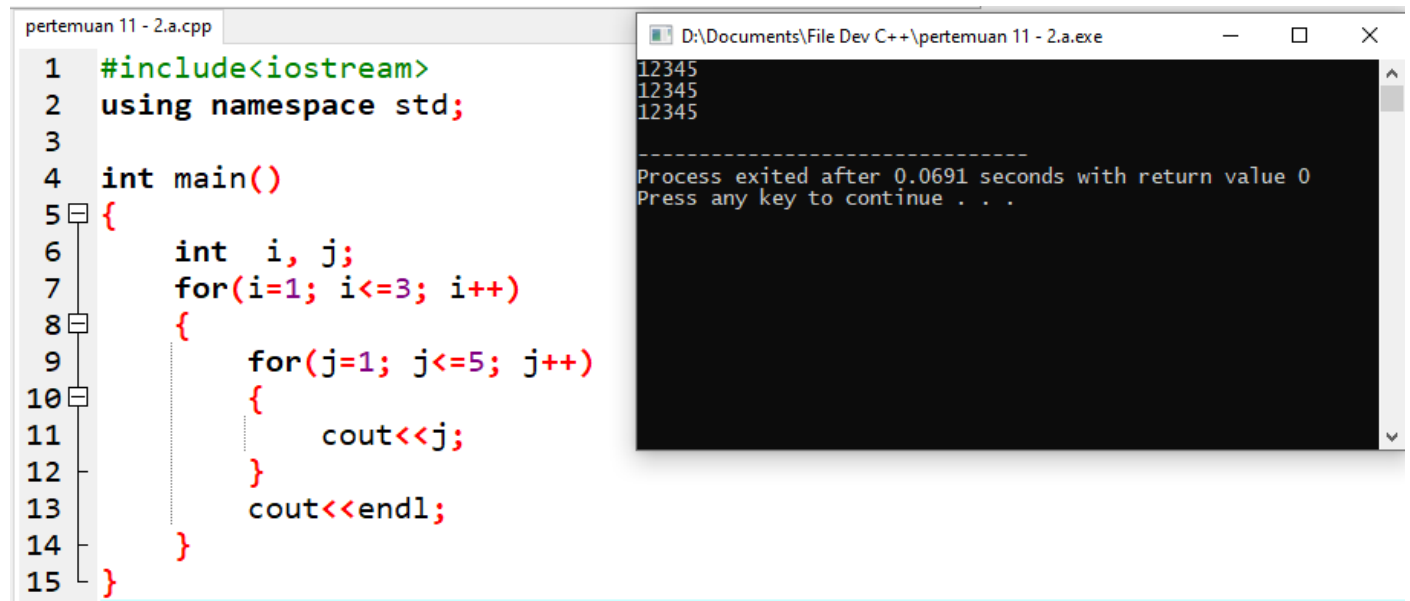
```
1 #include<iostream>
2 using namespace std;
3
4 int main()
5 {
6     int t = 0, i, j;
7
8     for(i=0; i<=4; i+=2)
9     {
10         for(j=1; j<=8; j+=3)
11         {
12             t = t + j;
13         }
14         cout<<t<<" "<<endl;
15     }
16 }
```

The output window shows the following text:

```
12
24
36
-----
Process exited after 0.06515 seconds with return value 0
Press any key to continue . . .
```

I	J
1	1
	2
2	2
	4
3	3
	6

2. a.



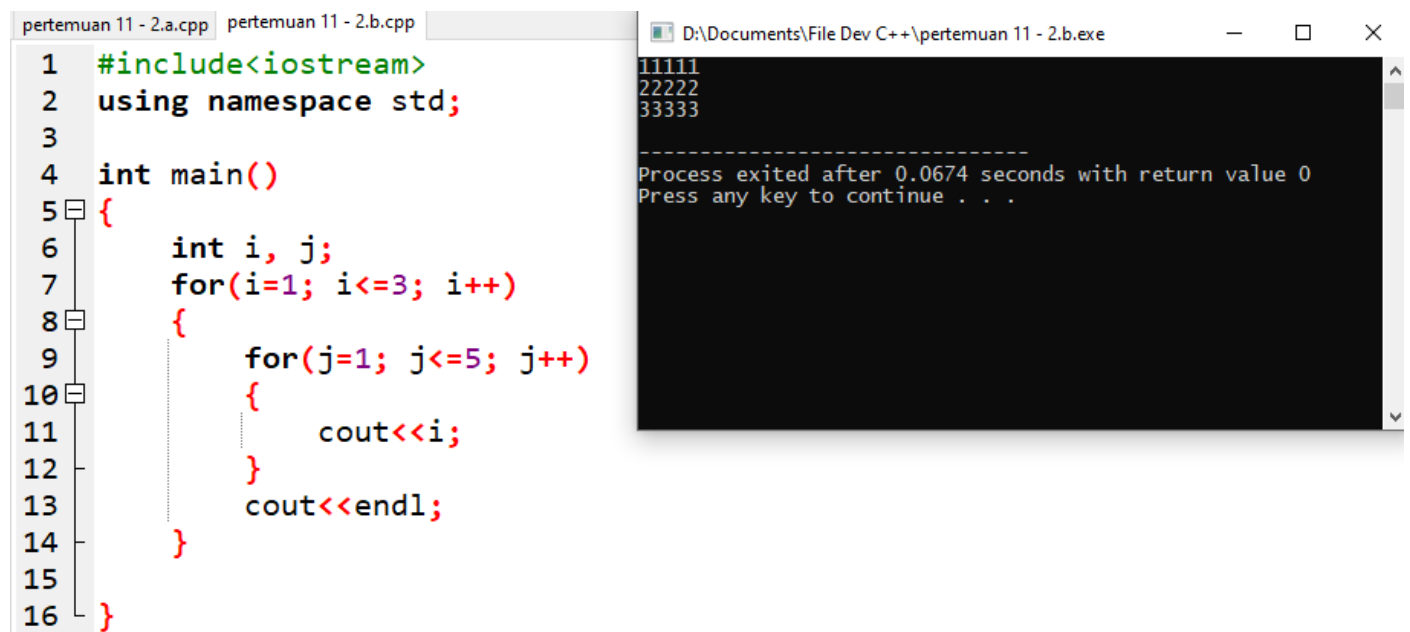
The screenshot shows a C++ IDE with two windows. The left window, titled 'pertemuan 11 - 2.a.cpp', contains the following code:

```
1 #include<iostream>
2 using namespace std;
3
4 int main()
5 {
6     int i, j;
7     for(i=1; i<=3; i++)
8     {
9         for(j=1; j<=5; j++)
10        {
11            cout<<j;
12        }
13        cout<<endl;
14    }
15 }
```

The right window, titled 'D:\Documents\File Dev C++\pertemuan 11 - 2.a.exe', shows the program's output:

```
12345
12345
12345
-----
Process exited after 0.0691 seconds with return value 0
Press any key to continue . . .
```

2. b.



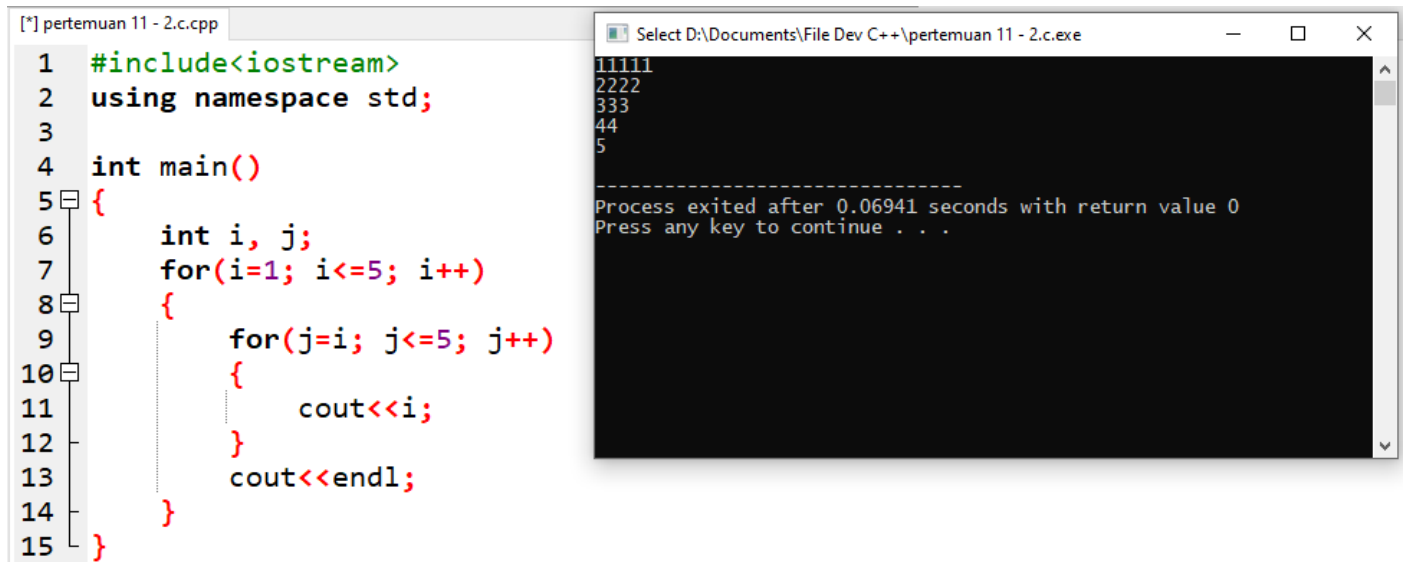
The screenshot shows a C++ IDE with two windows. The left window, titled 'pertemuan 11 - 2.a.cpp | pertemuan 11 - 2.b.cpp', contains the following code:

```
1 #include<iostream>
2 using namespace std;
3
4 int main()
5 {
6     int i, j;
7     for(i=1; i<=3; i++)
8     {
9         for(j=1; j<=5; j++)
10        {
11            cout<<i;
12        }
13        cout<<endl;
14    }
15 }
16 }
```

The right window, titled 'D:\Documents\File Dev C++\pertemuan 11 - 2.b.exe', shows the program's output:

```
11111
22222
33333
-----
Process exited after 0.0674 seconds with return value 0
Press any key to continue . . .
```

2. c.



The screenshot shows a C++ IDE with a file named "pertemuan 11 - 2.c.cpp". The code is as follows:

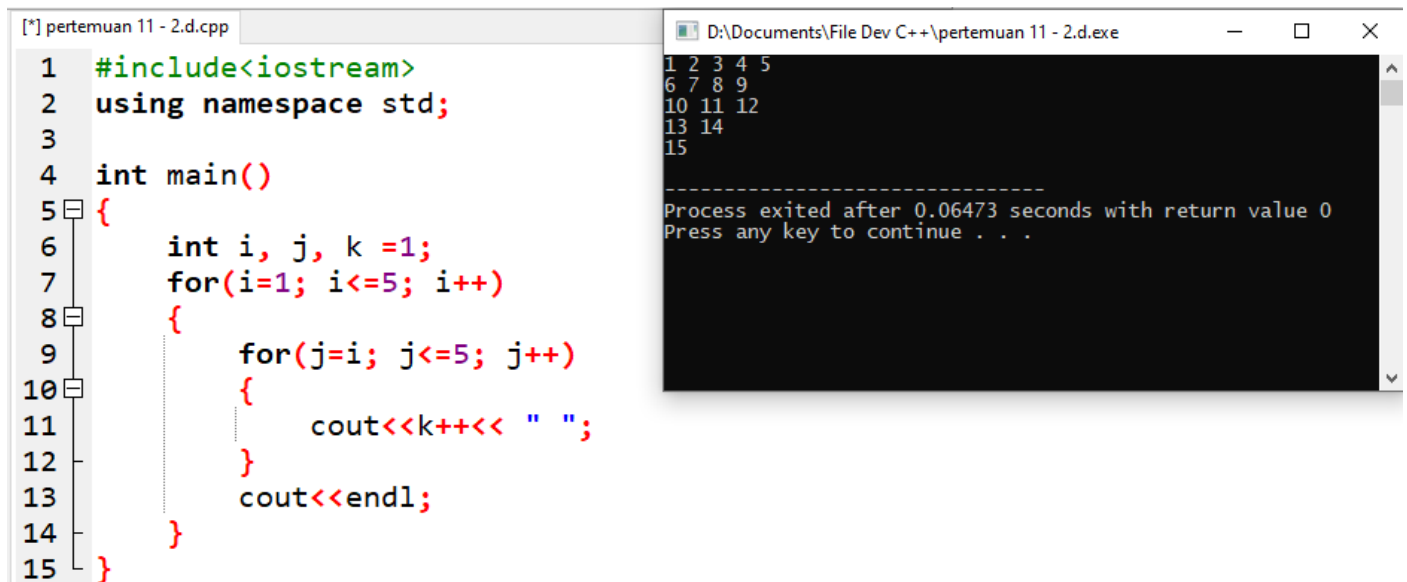
```
1 #include<iostream>
2 using namespace std;
3
4 int main()
5 {
6     int i, j;
7     for(i=1; i<=5; i++)
8     {
9         for(j=i; j<=5; j++)
10        {
11            cout<<i;
12        }
13        cout<<endl;
14    }
15 }
```

The output window shows the execution result:

```
11111
2222
333
44
5

-----
Process exited after 0.06941 seconds with return value 0
Press any key to continue . . .
```

2. d.



The screenshot shows a C++ IDE with a file named "pertemuan 11 - 2.d.cpp". The code is as follows:

```
1 #include<iostream>
2 using namespace std;
3
4 int main()
5 {
6     int i, j, k =1;
7     for(i=1; i<=5; i++)
8     {
9         for(j=i; j<=5; j++)
10        {
11            cout<<k++<< " ";
12        }
13        cout<<endl;
14    }
15 }
```

The output window shows the execution result:

```
1 2 3 4 5
6 7 8 9
10 11 12
13 14
15

-----
Process exited after 0.06473 seconds with return value 0
Press any key to continue . . .
```

3.

pertemuan 11 - tugas mandiri.cpp

```
1 #include<iostream>
2 using namespace std;
3
4 int main()
5 {
6     int pinjaman = 1000000;
7     int total;
8     int result;
9     int bulan_ke = 2;
10    int cicilan2;
11
12    float cicilan = 0.10; // 10%
13    float bunga = 0.015; // 1.5%
14
15    // pinjaman
16    total = (pinjaman * bunga) + pinjaman;
17    cicilan2 = total * cicilan;
18    result = total - cicilan2;
19
20    cout<<"Pinjaman bulan ke-1 beserta bunganya: ";
21    cout<<total<<" - "<<cicilan2<<" = "<<result<<endl;
22
23    for (int i=0; i <= 100; i++)
24    {
25        if(total > 1000000)
26        {
27            total = result;
28            cicilan2 = total * cicilan;
29            result = total - cicilan2;
30            cout<<"Pinjaman bulan ke-"<<bulan_ke<<" beserta bunganya: ";
31            cout<<total<<" - "<<cicilan2<<" = "<<result<<endl;
32
33            // increment bulan
34            bulan_ke++;
35        }
36    }
37 }
```

D:\Documents\File Dev C++\pertemuan 11 - tugas mandiri.exe

```
Pinjaman bulan ke-1 beserta bunganya: 1015000 - 1015000 = 9135000
Pinjaman bulan ke-2 beserta bunganya: 9135000 - 913500 = 8221500
Pinjaman bulan ke-3 beserta bunganya: 8221500 - 822150 = 7399350
Pinjaman bulan ke-4 beserta bunganya: 7399350 - 739935 = 6659415
Pinjaman bulan ke-5 beserta bunganya: 6659415 - 665941 = 5993474
Pinjaman bulan ke-6 beserta bunganya: 5993474 - 599347 = 5394127
Pinjaman bulan ke-7 beserta bunganya: 5394127 - 539412 = 4854715
Pinjaman bulan ke-8 beserta bunganya: 4854715 - 485471 = 4369244
Pinjaman bulan ke-9 beserta bunganya: 4369244 - 436924 = 3932320
Pinjaman bulan ke-10 beserta bunganya: 3932320 - 393232 = 3539088
Pinjaman bulan ke-11 beserta bunganya: 3539088 - 353908 = 3185180
Pinjaman bulan ke-12 beserta bunganya: 3185180 - 318518 = 2866662
Pinjaman bulan ke-13 beserta bunganya: 2866662 - 286666 = 2579996
Pinjaman bulan ke-14 beserta bunganya: 2579996 - 257999 = 2321997
Pinjaman bulan ke-15 beserta bunganya: 2321997 - 232199 = 2089798
Pinjaman bulan ke-16 beserta bunganya: 2089798 - 208979 = 1880819
Pinjaman bulan ke-17 beserta bunganya: 1880819 - 188081 = 1692738
Pinjaman bulan ke-18 beserta bunganya: 1692738 - 169273 = 1523465
Pinjaman bulan ke-19 beserta bunganya: 1523465 - 152346 = 1371119
Pinjaman bulan ke-20 beserta bunganya: 1371119 - 137111 = 1234008
Pinjaman bulan ke-21 beserta bunganya: 1234008 - 123400 = 1110608
Pinjaman bulan ke-22 beserta bunganya: 1110608 - 111060 = 999548
Pinjaman bulan ke-23 beserta bunganya: 999548 - 99954 = 899594
-----
Process exited after 0.07944 seconds with return value 0
Press any key to continue . . .
```