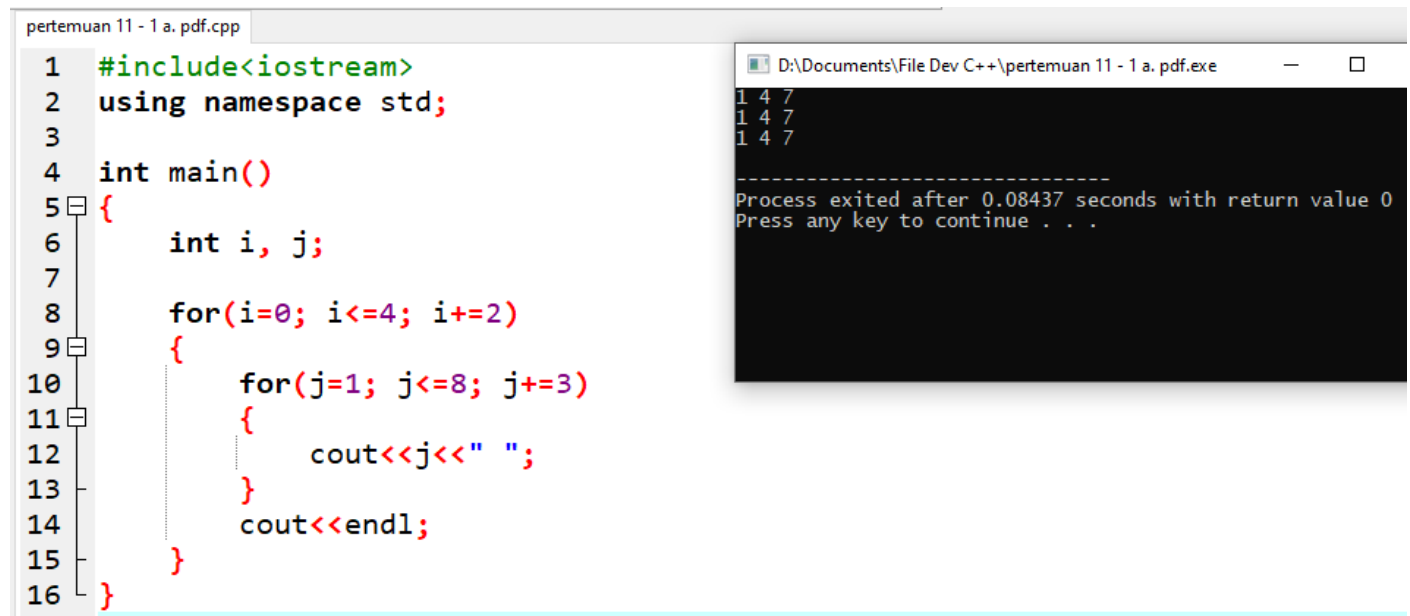Nama   : Andri Firman Saputra

NIM   : 201011402125

Kelas   : TPLP023

Tugas   : Algoritma & Pemrograman Pertemuan 11 – Tugas Mandiri
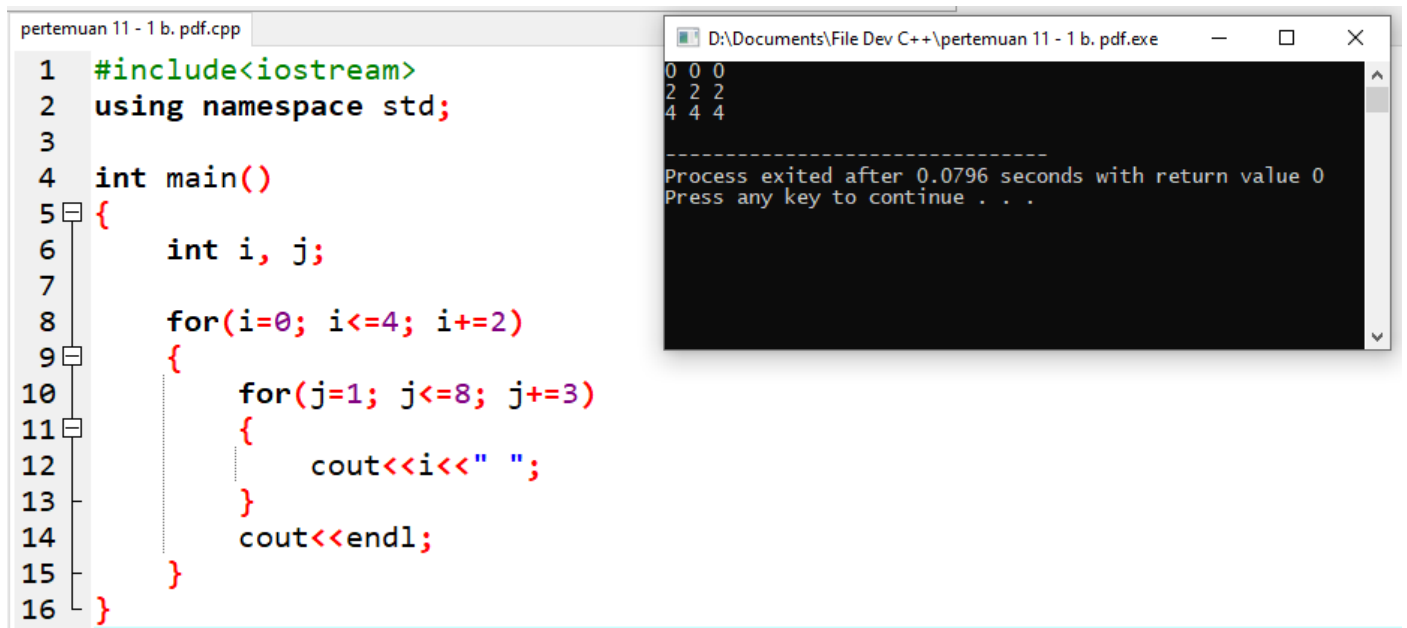
---

1. a.

```cpp
#include<iostream>
using namespace std;

int main()
{
    int i, j;

    for(i=0; i<=4; i+=2)
    {
        for(j=1; j<=8; j+=3)
        {
            cout<<j<<" ";
        }
        cout<<endl;
    }
}
```

```
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.

pertemuan 11 - 1 b. pdf.cpp

```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<<i<<" ";
13          }
14          cout<<endl;
15      }
16  }
```
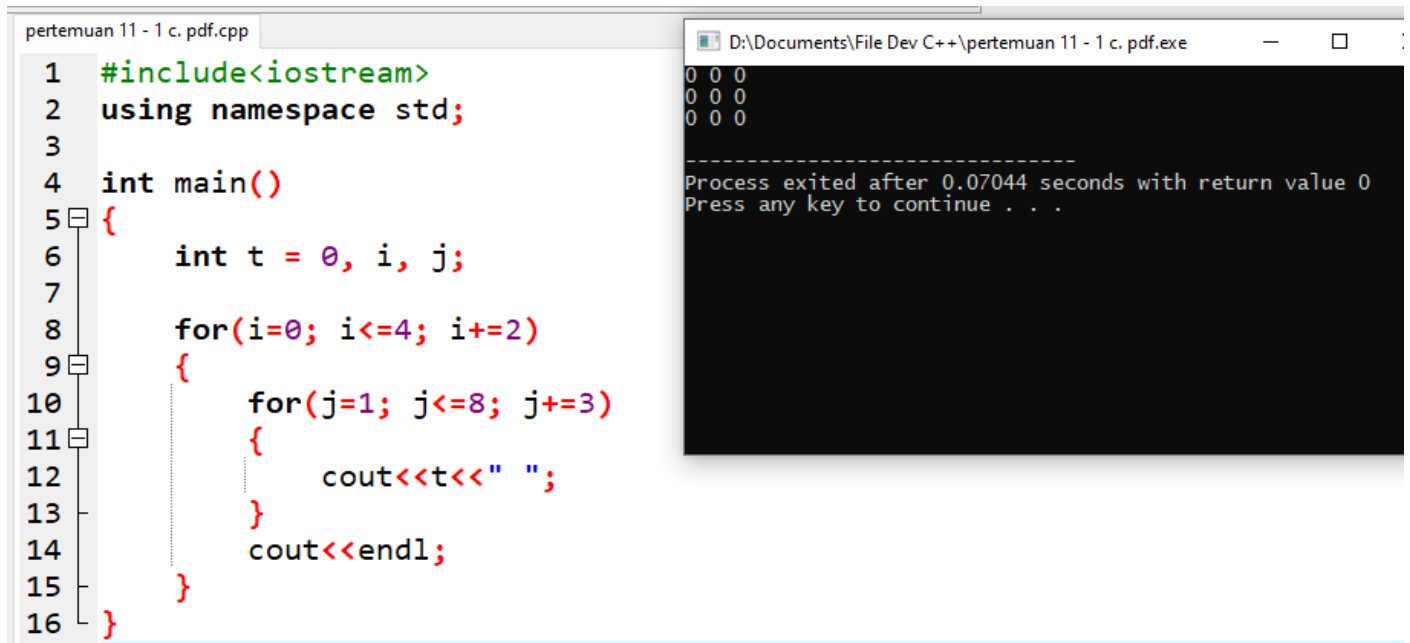
D:\Documents\File Dev C++\pertemuan 11 - 1 b. pdf.exe

```
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.

```cpp
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 }
```
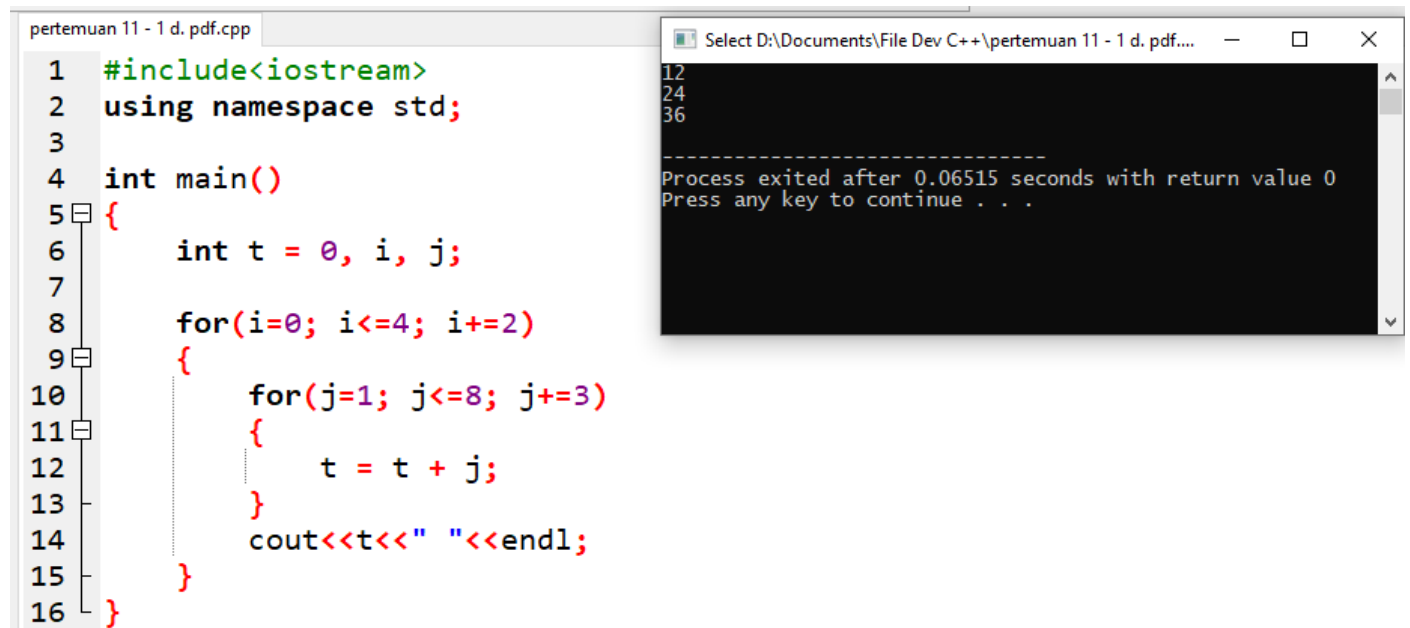
D:\Documents\File Dev C++\pertemuan 11 - 1 c. pdf.exe

```
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.

```cpp
#include<iostream>
using namespace std;

int main()
{
    int t = 0, i, j;

    for(i=0; i<=4; i+=2)
    {
        for(j=1; j<=8; j+=3)
        {
            t = t + j;
        }
        cout<<t<<" "<<endl;
    }
}
```

I	J
1	1
	2
2	2
	4
3	3
	6

2. a.
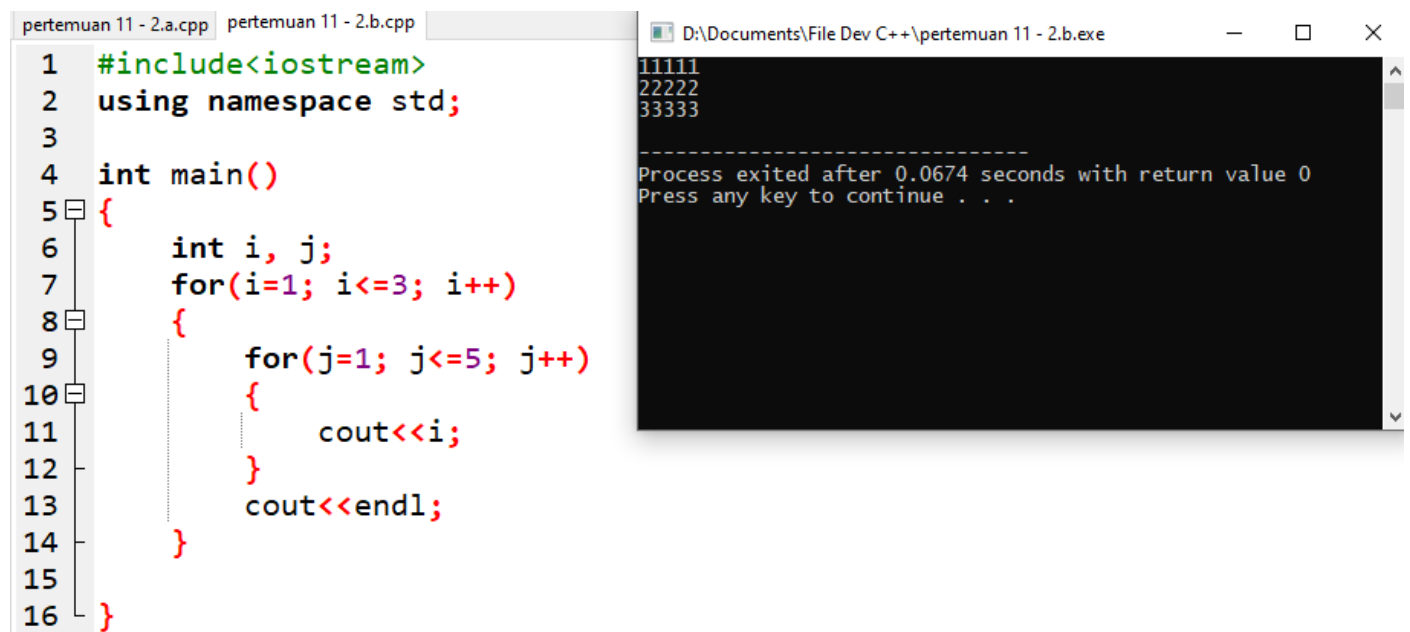
pertemuan 11 - 2.a.cpp

```cpp
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 }
```

D:\Documents\File Dev C++\pertemuan 11 - 2.a.exe

```
12345
12345
12345

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

2. b.
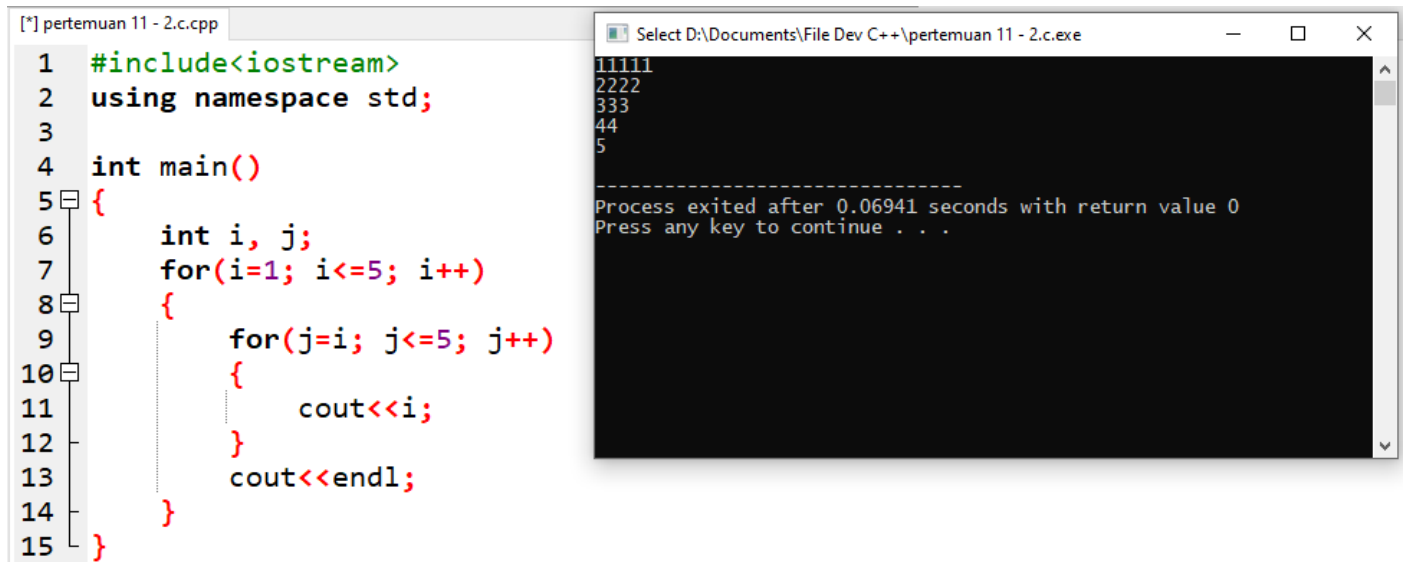
pertemuan 11 - 2.a.cpp   pertemuan 11 - 2.b.cpp

```cpp
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 }
```

D:\Documents\File Dev C++\pertemuan 11 - 2.b.exe

```
11111
22222
33333

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

2. c.

```
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   }
```
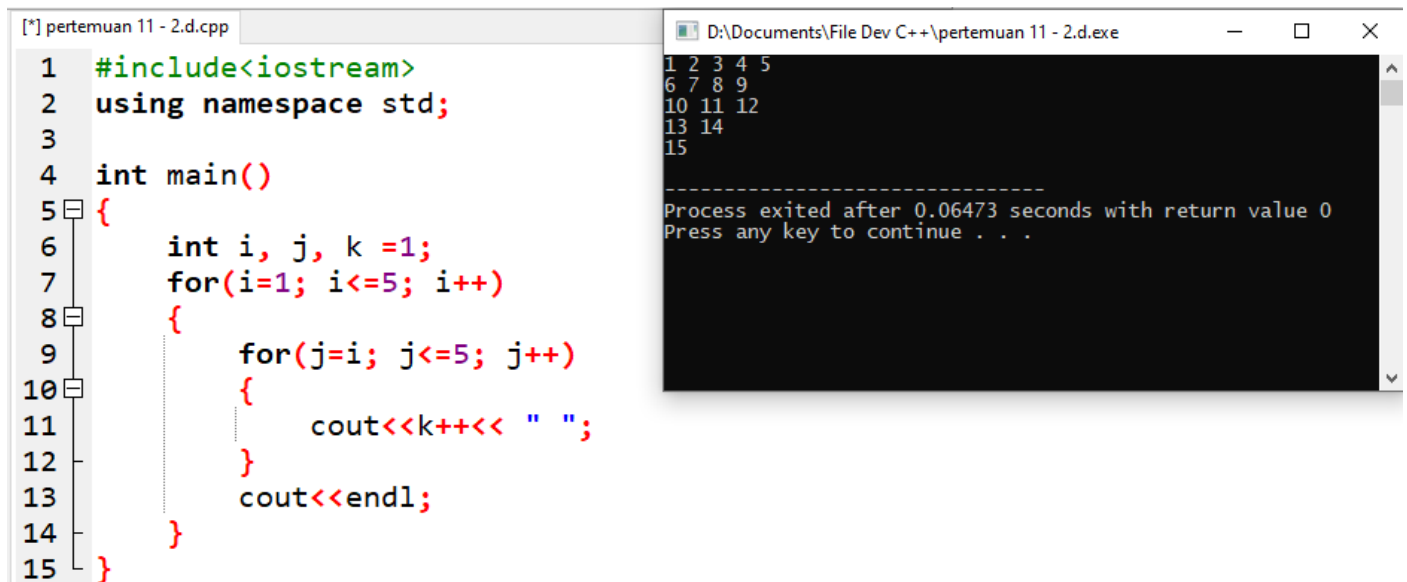
```
11111
2222
333
44
5

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

2. d.

```
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   }
```

```
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.

```cpp
#include<iostream>
using namespace std;

int main()
{
    int pinjaman = 10000000;
    int total;
    int result;
    int bulan_ke = 2;
    int cicilan2;

    float cicilan = 0.10; // 10%
    float bunga = 0.015; // 1.5%

    // pinjaman
    total    = (pinjaman * bunga) + pinjaman;
    cicilan2 = total * cicilan;
    result   = total - cicilan2;

    cout<<"Pinjaman bulan ke-1 beserta bunganya: ";
    cout<<total<<" - "<<cicilan2<<" = "<<result<<endl;

    for (int i=0; i <= 100; i++)
    {
        if(total > 1000000)
        {
            total    = result;
            cicilan2 = total * cicilan;
            result   = total - cicilan2;
            cout<<"Pinjaman bulan ke-"<<bulan_ke<<" beserta bunganya: ";
            cout<<total<<" - "<<cicilan2<<" = "<<result<<endl;

            // increment bulan
            bulan_ke++;
        }
    }
}
```

```
Pinjaman bulan ke-1 beserta bunganya: 10150000 - 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 . . .
```