PDP ACADEMY

TAKRORLANUVCHI OPERATORLAR

PDP ACADEMY

Reja

- C++ dasturlash tilida ***break*** operatori.
- C++ dasturlash tilida ***continue*** operatori.
- C++ dasturlash tilida ***return*** operatori.
- C++ dasturlash tilida ***Nested loops***.
- Amaliy mashqlar.

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Shartli belgilar

- Eslab qoling
- Bilib oling
- Misol uchun
- Mumkin emas
- Uyga topshiriqlar
- Amaliy yordam

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C++ dasturlash tilida break operatori

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Eslab qoling

break - C++ dasturlash tilida ***break*** operatori o‘zi joylashgan takrorlash operatorining bajarilishini to‘xtatishda qo‘llaniladi.

Qo‘shimcha ma’lumot

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```
for (init; condition; update) {
    // code
    if (condition to break) {
        break;
    }
    // code
}
```

```
while (condition) {
    // code
    if (condition to break) {
        break;
    }
    // code
}
```

```
do {
    // code
    if(condition to break){
        break;
    }
    // code
} while (condition);
```

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```cpp
#include<iostream>
using namespace std;
int main(){
      for(int i = 1; i < 10; i++){
           if(i == 5){
               break;
           }
           cout << " i = " << i << endl;
     }
}
```

```
i = 1
i = 2
i = 3
i = 4
```

```cpp
#include<iostream>
using namespace std;
int main(){
     int i = 1;
     while(i < 10){
           if(i == 5){
               break;
           }
           cout << " i = " << i << endl;
           i++;
     }
}
```

```
i = 1
i = 2
i = 3
i = 4
```

```cpp
#include<iostream>
using namespace std;
int main(){
     int i = 1;
     do{
           if(i == 5){
               break;
           }
           cout << " i = " << i << endl;
           i++;
     } while(i < 10);
}
```

```
i = 1
i = 2
i = 3
i = 4
```

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```cpp
#include<iostream>
using namespace std;
int main(){
      for(int i = 1; i < 10; i++){
            cout << " i = " << i << endl;
            if(i == 5){
                break;
             }
     }
}
```

```
i = 1
i = 2
i = 3
i = 4
i = 5
```

```cpp
#include<iostream>
using namespace std;
int main(){
     int i = 1;
     while(i < 10){
         cout << " i = " << i << endl;
         if(i == 5){
             break;
         }
         i++;
     }
}
```

```
i = 1
i = 2
i = 3
i = 4
i = 5
```

```cpp
#include<iostream>
using namespace std;
int main(){
     int i = 1;
     do{
          cout << " i = " << i << endl;
          if(i == 5){
              break;
           }
           i++;
     } while(i < 10);
}
```

```
i = 1
i = 2
i = 3
i = 4
i = 5
```

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C++ dasturlash tilida ***continue*** operatori

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Eslab qoling

continue operatori o‘zi joylashgan takrorlash operatorining bajarilishini bir qadamga chetlab o‘tadi, ya’ni bajarilishda o‘zi uchragan joydan takrorlash tanasining oxirigacha bo‘lgan buyruqlarni bajarilmasligini ta’minlaydi.

Qo‘shimcha ma’lumot

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```
for (init; condition; update) {
    // code
    if (condition to continue) {
        continue;
    }
    // code
}
```

```
while (condition) {
    // code
    if (condition to continue) {
        continue;
    }
    // code
}
```

```
do {
    // code
    if(condition to break){
        continue;
    }
    // code
} while (condition);
```

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```cpp
#include<iostream>
using namespace std;
int main(){
      for(int i = 1; i < 8; i++){
           if(i == 3){
               continue;
           }
           cout << " i = " << i << endl;
     }
}
```

```
i = 1
i = 2
i = 4
i = 5
i = 6
i = 7
```

```cpp
#include<iostream>
using namespace std;
int main(){
     int i = 0;
     while(i < 8){
           i++;
           if(i == 3){
               continue;
           }
           cout << " i = " << i << endl;
     }
}
```

```
i = 1
i = 2
i = 4
i = 5
i = 6
i = 7
```

```cpp
#include<iostream>
using namespace std;
int main(){
     int i = 1;
     do{
           i++;
           if(i == 3){
               continue;
           }
           cout << " i = " << i << endl
     } while(i < 7);
}
```

```
i = 1
i = 2
i = 4
i = 5
i = 6
i = 7
```

PDP ACADEMY

```cpp
#include<iostream>
using namespace std;
int main(){
     for(int i = 1; i <= 8; i++){
          cout << " i = " << i << endl;
          if(i == 3){
             continue;
          }
     }
   return 0;
}
```

```
i = 1
i = 2
i = 3
i = 4
i = 5
i = 6
i = 7
i = 8
```

```cpp
#include<iostream>
using namespace std;
int main(){
     int i = 0;
     while(i < 8){
          i++;
          cout << " i = " << i << endl;
          if(i == 3){
             continue;
          }
     }
}
```

```
i = 1
i = 2
i = 3
i = 4
i = 5
i = 6
i = 7
i = 8
```

```cpp
#include<iostream>
using namespace std;
int main(){
     int i = 0;
     do{
          i++;
          cout << " i = " << i << endl;
          if(i == 3){
              continue;
          }
     } while(i < 8);
}
```

```
i = 1
i = 2
i = 3
i = 4
i = 5
i = 6
i = 7
i = 8
```

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C++ dasturlash tilida ***return*** operatori

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Eslab qoling

return operatori o‘zi joylashgan funksiyaning bajarilishini to‘xtatadi. Agar funksiya qiymat qaytarishi kerak bo‘lsa, kerakli natijani qaytaruvchi operator hisoblanadi.

```
return [expression];
```

Qo‘shimcha ma’lumot

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```
for (init; condition; update){
        // code
        if(condition to break){
            return 0;
        }
        // code
}
```

```
while (condition) {
        // code
        if(condition to break){
            return 0;
        }
        // code
}
```

```
do {
        // code
        if(condition to break){
            return 0;
        }
        // code
} while (condition);
```

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```cpp
#include<iostream>
using namespace std;
int main(){
      for(int i = 1; i < 8; i++){
         if(i == 3){
             return 0;
         }
         cout << " i = " << i << endl;
     }
}
```

```
i = 1
i = 2
Process returned 0 (0x0)
execution time : 0.047 s
Press any key to continue.
```

```cpp
#include<iostream>
using namespace std;
int main(){
     int i = 1;
     while(i < 8){
           if(i == 3){
                return 0;
           }
           cout << " i = " << i << endl;
           i++;
     }
}
```

```
i = 1
i = 2
Process returned 0 (0x0)
execution time : 0.047 s
Press any key to continue.
```

```cpp
#include<iostream>
using namespace std;
int main(){
     int i = 1;
     do{
           if(i == 3){
               return 0;
           }
           cout << " i = " << i << endl;
           i++;
     } while(i < 8);
}
```

```
i = 1
i = 2
Process returned 0 (0x0)
execution time : 0.047 s
Press any key to continue.
```

PDP ACADEMY

```cpp
#include<iostream>
using namespace std;
int main(){
      for(int i = 1; i < 8; i++){
         cout << " i = " << i << endl;
         if(i == 3){
              return 0;
         }
     }
}
```

```
i = 1
i = 2
i = 3
Process returned 0 (0x0)
execution time : 0.047 s
Press any key to continue.
```

```cpp
#include<iostream>
using namespace std;
int main(){
     int i = 1;
     while(i < 8){
          cout << " i = " << i << endl;
          if(i == 3){
              return 0;
          }
          i++;
     }
}
```

```
i = 1
i = 2
i = 3
Process returned 0 (0x0)
execution time : 0.047 s
Press any key to continue.
```

```cpp
#include<iostream>
using namespace std;
int main(){
     int i = 1;
     do{
          cout << " i = " << i << endl;
          if(i == 3){
              return 0;
          }
          i++;
     } while(i < 8);
}
```

```
i = 1
i = 2
i = 3
Process returned 0 (0x0)
execution time : 0.047 s
Press any key to continue.
```

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C++ dasturlash tilida

Nested loops

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```
for (init; condition; update){
    for(init; condition; update){
        statement(s);
    }
    statement(s);
}
```

```
while (condition) {
    while(condition){
        statement(s);
    }
    statement(s);
}
```

```
do {
    do {
        statement(s);
    } while (condition);
    statement(s);
} while (condition);
```

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```cpp
#include <iostream>

using namespace std;

int main() {

   int rows = 5;
   int columns = 3;

   for (int i = 1; i <= rows; ++i) {
      for (int j = 1; j <= columns; ++j){
         cout << "*  ";
      }
      cout << endl;
   }

   return 0;
}
```

```
*  *  *
*  *  *
*  *  *
*  *  *
*  *  *
Process returned 0 (0x0)
```

```cpp
#include <iostream>

using namespace std;

int main() {
    int weeks = 3, days= 7;

    for (int i = 1; i <= weeks; ++i) {
        cout << "Week: " << i << endl;

        for (int j = 1; j <= days; ++j) {
            if (i == 2) {
                break;
            }
            cout << " Day:" << j << endl;
        }
    }
}
```

```
Week: 1
    Day:1
    Day:2
    Day:3
    Day:4
    Day:5
```

```cpp
#include <iostream>

using namespace std;

int main() {
    int weeks = 3, days = 7;

    for (int i = 1; i <= weeks; ++i) {
        cout << "Week: " << i << endl;

        for (int j = 1; j <= days; ++j) {
            if (j % 2 != 0) {
                continue;
            }
            cout << " Day:" << j << endl;
        }
    }
}
```

```
Week: 1
    Day:2
    Day:4
    Day:6
Week: 2
    Day:2
```

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Amaliy mashqlar

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Uyga topshiriq

1

Foydalanuvchi tomonidan sonlar kiritilaveradi. Bu jarayon musbat bo‘lmagan son kiritilguncha davom etadi. Kiritilgan musbat sonlarning yig‘indisini toping.

Amaliy yordam

PDP ACADEMY

Uyga topshiriq

2

Foydalanuvchi tomonidan sonlar kiritilaveradi. Bu jarayon musbat bo‘lmagan son kiritilguncha davom etadi. Kiritilgan musbat sonlarning yig‘indisini toping. Bunda yig‘indiga 50 dan katta kiritilgan sonlar qo‘shilmaydi.

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Uyga topshiriq

3

N natural soni berilgan. Uning tub yoki tub emasligini aniqlovchi dastur tuzing. Tub son - bu faqat o‘ziga va 1 ga qoldiqsiz bo‘linadigan son.

1 soni tub ham, murakkab ham emas.

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Uyga topshiriq

4

C++ dasturlash tilida karra jadvalini to‘liq (2 dan 9 gacha) ekranga chiqaring dastur tuzilsin.

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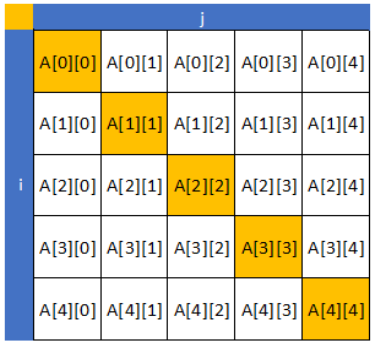
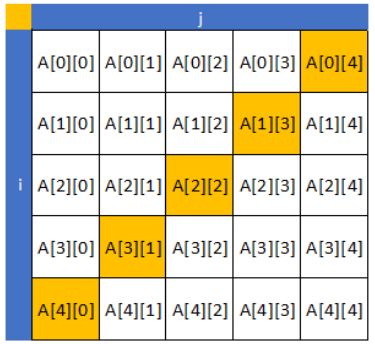
Uyga topshiriq

5

Rasmda sariq rang bilan belgilab ko’rsatilgan shakilda ekranga chiqaruvchi dastur tuzilsin.





Amaliy yordam

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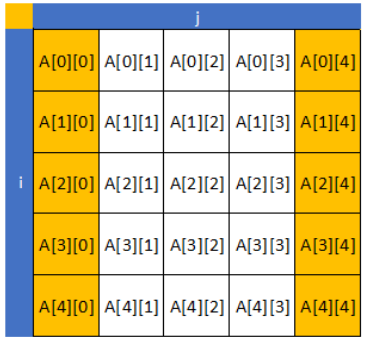
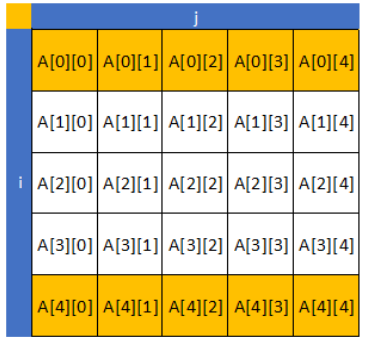
Uyga topshiriq

6

Rasmda sariq rang bilan belgilab ko’rsatilgan shakilda ekranga chiqaruvchi dastur tuzilsin.





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Uyga topshiriq

7

Rasmda sariq rang bilan belgilab ko’rsatilgan shakilda ekranga chiqaruvchi dastur tuzilsin.

	j				
i	A[0][0]	A[0][1]	A[0][2]	A[0][3]	A[0][4]
	A[1][0]	A[1][1]	A[1][2]	A[1][3]	A[1][4]
	A[2][0]	A[2][1]	A[2][2]	A[2][3]	A[2][4]
	A[3][0]	A[3][1]	A[3][2]	A[3][3]	A[3][4]
	A[4][0]	A[4][1]	A[4][2]	A[4][3]	A[4][4]

	j				
i	A[0][0]	A[0][1]	A[0][2]	A[0][3]	A[0][4]
	A[1][0]	A[1][1]	A[1][2]	A[1][3]	A[1][4]
	A[2][0]	A[2][1]	A[2][2]	A[2][3]	A[2][4]
	A[3][0]	A[3][1]	A[3][2]	A[3][3]	A[3][4]
	A[4][0]	A[4][1]	A[4][2]	A[4][3]	A[4][4]

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Uyga topshiriq

8

Rasmda sariq rang bilan belgilab ko’rsatilgan shakilda ekranga chiqaruvchi dastur tuzilsin.

i \ j					
	A[0][0]	A[0][1]	A[0][2]	A[0][3]	A[0][4]
	A[1][0]	A[1][1]	A[1][2]	A[1][3]	A[1][4]
	A[2][0]	A[2][1]	A[2][2]	A[2][3]	A[2][4]
	A[3][0]	A[3][1]	A[3][2]	A[3][3]	A[3][4]
	A[4][0]	A[4][1]	A[4][2]	A[4][3]	A[4][4]

i \ j					
	A[0][0]	A[0][1]	A[0][2]	A[0][3]	A[0][4]
	A[1][0]	A[1][1]	A[1][2]	A[1][3]	A[1][4]
	A[2][0]	A[2][1]	A[2][2]	A[2][3]	A[2][4]
	A[3][0]	A[3][1]	A[3][2]	A[3][3]	A[3][4]
	A[4][0]	A[4][1]	A[4][2]	A[4][3]	A[4][4]

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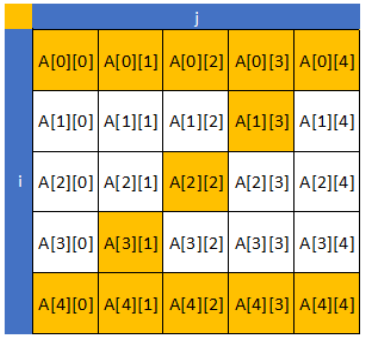
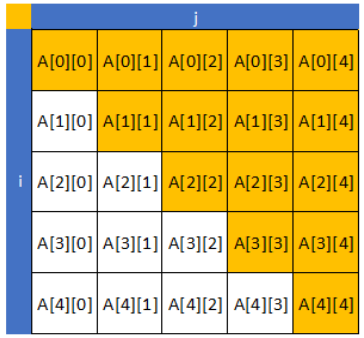
Uyga topshiriq

9

Rasmda sariq rang bilan belgilab ko’rsatilgan shakilda ekranga chiqaruvchi dastur tuzilsin.





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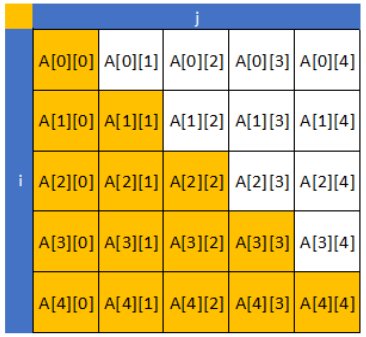
Uyga topshiriq

10

Rasmda sariq rang bilan belgilab ko’rsatilgan shakilda ekranga chiqaruvchi dastur tuzilsin.



Amaliy yordam

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Uyga topshiriq

Rasmda sariq rang bilan belgilab ko’rsatilgan shakilda ekranga chiqaruvchi dastur tuzilsin.

i \ j					
	A[0][0]	A[0][1]	A[0][2]	A[0][3]	A[0][4]
	A[1][0]	A[1][1]	A[1][2]	A[1][3]	A[1][4]
	A[2][0]	A[2][1]	A[2][2]	A[2][3]	A[2][4]
	A[3][0]	A[3][1]	A[3][2]	A[3][3]	A[3][4]
	A[4][0]	A[4][1]	A[4][2]	A[4][3]	A[4][4]

i \ j					
	A[0][0]	A[0][1]	A[0][2]	A[0][3]	A[0][4]
	A[1][0]	A[1][1]	A[1][2]	A[1][3]	A[1][4]
	A[2][0]	A[2][1]	A[2][2]	A[2][3]	A[2][4]
	A[3][0]	A[3][1]	A[3][2]	A[3][3]	A[3][4]
	A[4][0]	A[4][1]	A[4][2]	A[4][3]	A[4][4]

PDP ACADEMY

Uyga topshiriq

Rasmda sariq rang bilan belgilab ko’rsatilgan shakilda ekranga chiqaruvchi dastur tuzilsin.

	j				
i	A[0][0]	A[0][1]	A[0][2]	A[0][3]	A[0][4]
	A[1][0]	A[1][1]	A[1][2]	A[1][3]	A[1][4]
	A[2][0]	A[2][1]	A[2][2]	A[2][3]	A[2][4]
	A[3][0]	A[3][1]	A[3][2]	A[3][3]	A[3][4]
	A[4][0]	A[4][1]	A[4][2]	A[4][3]	A[4][4]

	j				
i	A[0][0]	A[0][1]	A[0][2]	A[0][3]	A[0][4]
	A[1][0]	A[1][1]	A[1][2]	A[1][3]	A[1][4]
	A[2][0]	A[2][1]	A[2][2]	A[2][3]	A[2][4]
	A[3][0]	A[3][1]	A[3][2]	A[3][3]	A[3][4]
	A[4][0]	A[4][1]	A[4][2]	A[4][3]	A[4][4]

PDP ACADEMY

Uyga topshiriq

Rasmda sariq rang bilan belgilab ko’rsatilgan shakilda ekranga chiqaruvchi dastur tuzilsin.

i \ j					
	A[0][0]	A[0][1]	A[0][2]	A[0][3]	A[0][4]
	A[1][0]	A[1][1]	A[1][2]	A[1][3]	A[1][4]
	A[2][0]	A[2][1]	A[2][2]	A[2][3]	A[2][4]
	A[3][0]	A[3][1]	A[3][2]	A[3][3]	A[3][4]
	A[4][0]	A[4][1]	A[4][2]	A[4][3]	A[4][4]

i \ j					
	A[0][0]	A[0][1]	A[0][2]	A[0][3]	A[0][4]
	A[1][0]	A[1][1]	A[1][2]	A[1][3]	A[1][4]
	A[2][0]	A[2][1]	A[2][2]	A[2][3]	A[2][4]
	A[3][0]	A[3][1]	A[3][2]	A[3][3]	A[3][4]
	A[4][0]	A[4][1]	A[4][2]	A[4][3]	A[4][4]

PDP ACADEMY

Uyga topshiriq

Rasmda sariq rang bilan belgilab ko’rsatilgan shakilda ekranga chiqaruvchi dastur tuzilsin.

i \ j					
	A[0][0]	A[0][1]	A[0][2]	A[0][3]	A[0][4]
	A[1][0]	A[1][1]	A[1][2]	A[1][3]	A[1][4]
	A[2][0]	A[2][1]	A[2][2]	A[2][3]	A[2][4]
	A[3][0]	A[3][1]	A[3][2]	A[3][3]	A[3][4]
	A[4][0]	A[4][1]	A[4][2]	A[4][3]	A[4][4]

i \ j					
	A[0][0]	A[0][1]	A[0][2]	A[0][3]	A[0][4]
	A[1][0]	A[1][1]	A[1][2]	A[1][3]	A[1][4]
	A[2][0]	A[2][1]	A[2][2]	A[2][3]	A[2][4]
	A[3][0]	A[3][1]	A[3][2]	A[3][3]	A[3][4]
	A[4][0]	A[4][1]	A[4][2]	A[4][3]	A[4][4]

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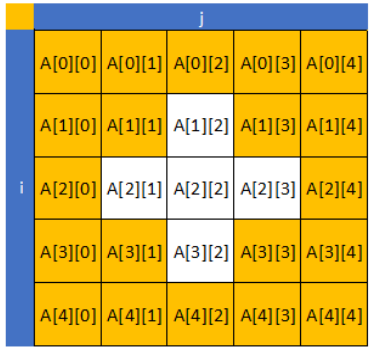
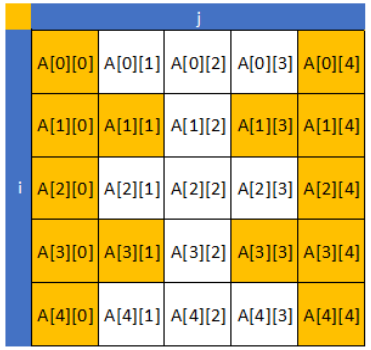
Uyga topshiriq

15

Rasmda sariq rang bilan belgilab ko’rsatilgan shakilda ekranga chiqaruvchi dastur tuzilsin.





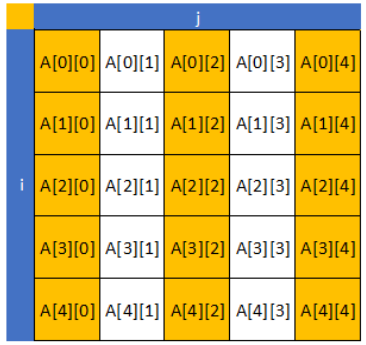
Amaliy yordam

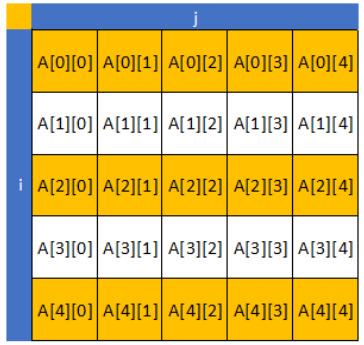
PDP ACADEMY

Uyga topshiriq

16

Rasmda sariq rang bilan belgilab ko’rsatilgan shakilda ekranga chiqaruvchi dastur tuzilsin.





PDP ACADEMY

Uyga topshiriq

Rasmda sariq rang bilan belgilab ko’rsatilgan shakilda ekranga chiqaruvchi dastur tuzilsin.

	j				
i	A[0][0]	A[0][1]	A[0][2]	A[0][3]	A[0][4]
	A[1][0]	A[1][1]	A[1][2]	A[1][3]	A[1][4]
	A[2][0]	A[2][1]	A[2][2]	A[2][3]	A[2][4]
	A[3][0]	A[3][1]	A[3][2]	A[3][3]	A[3][4]
	A[4][0]	A[4][1]	A[4][2]	A[4][3]	A[4][4]

	j				
i	A[0][0]	A[0][1]	A[0][2]	A[0][3]	A[0][4]
	A[1][0]	A[1][1]	A[1][2]	A[1][3]	A[1][4]
	A[2][0]	A[2][1]	A[2][2]	A[2][3]	A[2][4]
	A[3][0]	A[3][1]	A[3][2]	A[3][3]	A[3][4]
	A[4][0]	A[4][1]	A[4][2]	A[4][3]	A[4][4]

PDP ACADEMY

Uyga topshiriq

Rasmda sariq rang bilan belgilab ko’rsatilgan shakilda ekranga chiqaruvchi dastur tuzilsin.

	j				
i	A[0][0]	A[0][1]	A[0][2]	A[0][3]	A[0][4]
	A[1][0]	A[1][1]	A[1][2]	A[1][3]	A[1][4]
	A[2][0]	A[2][1]	A[2][2]	A[2][3]	A[2][4]
	A[3][0]	A[3][1]	A[3][2]	A[3][3]	A[3][4]
	A[4][0]	A[4][1]	A[4][2]	A[4][3]	A[4][4]

	j				
i	A[0][0]	A[0][1]	A[0][2]	A[0][3]	A[0][4]
	A[1][0]	A[1][1]	A[1][2]	A[1][3]	A[1][4]
	A[2][0]	A[2][1]	A[2][2]	A[2][3]	A[2][4]
	A[3][0]	A[3][1]	A[3][2]	A[3][3]	A[3][4]
	A[4][0]	A[4][1]	A[4][2]	A[4][3]	A[4][4]

PDP ACADEMY

Uyga topshiriq

Rasmda sariq rang bilan belgilab ko’rsatilgan shakilda ekranga chiqaruvchi dastur tuzilsin.

i \ j					
	A[0][0]	A[0][1]	A[0][2]	A[0][3]	A[0][4]
	A[1][0]	A[1][1]	A[1][2]	A[1][3]	A[1][4]
	A[2][0]	A[2][1]	A[2][2]	A[2][3]	A[2][4]
	A[3][0]	A[3][1]	A[3][2]	A[3][3]	A[3][4]
	A[4][0]	A[4][1]	A[4][2]	A[4][3]	A[4][4]

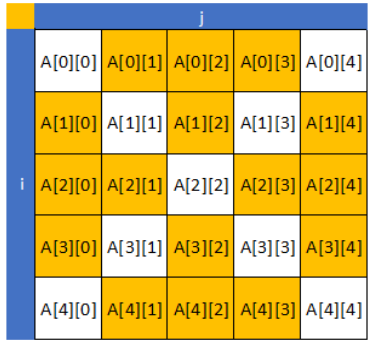
i \ j					
	A[0][0]	A[0][1]	A[0][2]	A[0][3]	A[0][4]
	A[1][0]	A[1][1]	A[1][2]	A[1][3]	A[1][4]
	A[2][0]	A[2][1]	A[2][2]	A[2][3]	A[2][4]
	A[3][0]	A[3][1]	A[3][2]	A[3][3]	A[3][4]
	A[4][0]	A[4][1]	A[4][2]	A[4][3]	A[4][4]

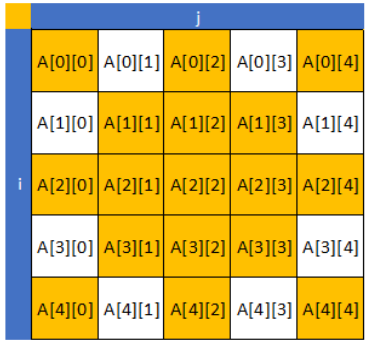
PDP ACADEMY

Uyga topshiriq

20

Rasmda sariq rang bilan belgilab ko’rsatilgan shakilda ekranga chiqaruvchi dastur tuzilsin.





Amaliy yordam

PDP ACADEMY

E’tiboringiz uchun raxmat