

C++ Assignments | Pattern Printing - 1 | Week 3

1. Print the following pattern

1 1 1 1

2 2 2 2

3 3 3 3

4 4 4 4

```
#include<iostream>

using namespace std;

int main( ) {

    int n;

    cin>>n;

    for (int i = 1; i <= n ; i++){

        for (int j = 1; j <= n; j++){

            cout<<i<<" ";

        }

        cout<<endl;

    }

}
```

2. Print the following pattern

Input: n = 4

Output:

1 2 3 4

1 2 3

1 2

1

```
#include<iostream>

using namespace std;
```

```

int main( ) {

    int n;

    cin>>n;

    for (int i = 1; i <= n ; i++){

        for (int j = 1 ; j <= n-i+1; j++)

            {

                cout<<j<<" ";

            }

        cout<<endl;

    }

}

```

3. Print the following pattern

Input: n = 4

Output:

A

A B

A B C

A B C D

```

#include<iostream>

using namespace std;

int main( ) {

    int n;

    cin>>n;

    for (int i = 1; i <= n ; i++){

```

```

        for (int j = 1 ; j <=i ; j++){

            cout<<char(j+64)<<" ";

        }

        cout<<endl;

    }

}

```

4. Print the following pattern

Input: n = 4

Output:

1

A B

1 2 3

A B C D

1 2 3 4 5

```

#include<iostream>

using namespace std;

int main( ) {

    int n;

    cin>>n;

    for (int i = 1; i <= n ; i++){

        for (int j = 1 ; j <=i ; j++){

            if(i%2==0) cout<<char(j+64)<<" ";

            else cout<<j<<" ";

        }

        cout<<endl;

    }

}

```

```
}  
}
```

5. Print the following pattern

Input n = 4

Output:

```
*  
**  
***  
****  
***  
**  
*
```

```
#include<iostream>  
  
using namespace std;  
  
int main( ) {  
  
    int n;  
  
    cout<<"enter value of n ";  
    cin>>n;  
  
    for (int i = 0; i <= n ; i++){  
        for (int j = 0 ; j <=i-1 ; j++){  
            cout<<"*";  
        }  
        cout<<endl;  
    }  
  
    for (int i = 1; i <= n ; i++){  
        for (int j = 0 ; j <=n-i-1 ; j++){  
            cout<<"*";  
        }  
    }  
}
```

```

    }

    cout<<endl;

}

}

```

6. Print the following pattern

Sample Input : m = 4, n = 6

Sample Output :

* *

* *

```

#include<iostream>

using namespace std;

int main( ) {

int m;

cout<<"enter value of rows ";

cin>>m;

int n;

cout<<"enter value of column ";

cin>>n;

for (int i = 1; i <= m ; i++){

    for (int j = 1 ; j <=n ; j++){

        if(i==1 || i==m || j==1 || j==n)  cout<<"* ";

        else cout<<" ";

    }

    cout<<endl;
}

```

```
}  
}
```

7. Print the following pattern

Sample Input : n = 4

Output :

```
****  
  
****  
  
****  
  
****
```

```
#include<iostream>  
  
using namespace std;  
  
int main( ) {  
    int n;  
  
    cout<<"enter value of n ";  
    cin>>n;  
  
    for (int i = 1; i <= n ; i++){  
        for (int j = 1 ; j <=n-i ; j++){  
            cout<<" ";  
        }  
        for (int j = 1 ; j <=n ; j++){  
            cout<<"*";  
        }  
        cout<<endl;  
    }  
}
```

```
}
```

8, Print the following pattern

Sample Input : n= 4

Output :

```
1
1 2
1 2 3
1 2 3 4
```

```
#include<iostream>

using namespace std;

int main( ) {
    int n;
    cout<<"enter value of n ";
    cin>>n;
    for (int i = 1; i <= n ; i++){
        for (int j = 1 ; j <=n-i ; j++){
            cout<<" ";
        }
        for (int j = 1 ; j <=i ; j++){
            cout<<j;
        }
        cout<<endl;
    }
}
```

9. Print the following pattern

Input : n = 4

Output :

A
A B
A B C
A B C D

```
#include<iostream>

using namespace std;

int main( ) {

int n;

cout<<"enter value of n ";

cin>>n;

for (int i = 1; i <= n ; i++){

    for (int j = 1 ; j <=n-i ; j++){

        cout<<" ";

    }

    for (int j = 1 ; j <=i ; j++){

        cout<<char(j+64) ;

    }

    cout<<endl;

}

}
```

10.Print the following pattern

Input: n = 4

Output:

1
2 1
3 2 1
4 3 2 1

```
#include<iostream>
```



```

using namespace std;

int main( ) {
    int n;
    cout<<"enter value of n ";
    cin>>n;
    for (int i = 1; i <= n ; i++){
        for (int j = i ; j >=1 ; j--){
            cout<<j;

        }
        cout<<endl;
    }
}

```

11.Print the following pattern

Input: n = 4

Output:

```

*
**
***
****
***
**
*

```

```

#include<iostream>

using namespace std;

int main( ) {
    int n;

```

```
cout<<"enter value of n ";
cin>>n;

for (int i = 1; i <= n ; i++){

    for (int j = 1 ; j <=n-i ; j++){

        cout<<"  ";

    }

    for (int j = 1 ; j <=i ; j++){

        cout<<"* ";

    }

    cout<<endl;

}

for (int i = 1; i <= n ; i++){

    for (int j = 1 ; j <=i ; j++){

        cout<<"  ";

    }

    for (int j = 1 ; j <=n-i ; j++){

        cout<<"* ";

    }

    cout<<endl;

}

}
```

