

Pattern Printing – 1

Q1. Print the following pattern

```
1111
2222
3333
4444
```

```
#include <iostream>
using namespace std;
int main()
{
    int n;
    cout << "Enter a number : " << endl;
    cin >> n;
    for (int i = 1; i <= n; i++)
    {
        for (int j = 1; j <= n; j++)
        {
            cout << i;
        }
        cout << endl;
    }
}
```

```
PS C:\Users\ITC\OneDrive\Desktop\C++WITH DSA\PRACTICE c++with DSA>
cd "c:\Users\ITC\OneDrive\Desktop\C++WITH DSA\PRACTICE c++with DSA\" ; if ($?) { g++ assign
mentprint2.cpp -o assignmentprint2 } ; if ($?) { .\assignmentprint2 }
Enter a number :
4
1111
2222
3333
4444
```

Q2. 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;
    cout << "Enter a number : ";
    cin >> n;
    for (int i = 1; i <= n; i++)
    {
        for (int j = 1; j <= n - i + 1; j++)
        {
            cout << j;
        }
        cout << endl;
    }
}
```

```
PS C:\Users\ITC\OneDrive\Desktop\C++WITH DSA\PRACTICE c++with DSA> cd "c:\Users\ITC\OneDrive\Desktop\C++WITH DSA\PRACTICE c++with DSA\" ; if ($?) { g++ assignmentprint2.cpp -o assignmentprint2 } ; if ($?) { .\assignmentprint2 }
Enter a number : 4
1234
123
12
1
```

Q3. Print the following pattern

Input: n = 4

Output:

A
AB
ABC
ABCD

```
#include <iostream>
using namespace std;
int main()
{
    int n;
    cout << "Enter a number : ";
    cin >> n;
    for (int i = 1; i <= n; i++)
    {
        for (int j = 65; j <= i + 64; j++)
        {
            cout << char(j);
        }
        cout << endl;
    }
}
```

```
PS C:\Users\ITC\OneDrive\Desktop\C++WITH DSA\PRAC
ve\Desktop\C++WITH DSA\PRACTICE c++with DSA\" ; i
gnmentprint2 } ; if ($?) { .\assignmentprint2 }
Enter a number : 4
A
AB
ABC
ABCD
```

Q4. 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;
    cout<<"Enter a number : ";
    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;
    }
}
```

```
PS C:\Users\ITC\OneDrive\Desktop\C++WITH DSA\PR
ve\Desktop\C++WITH DSA\PRACTICE c++with DSA\" ;
gmentprint2 } ; if ($?) { .\assignmentprint2 }
Enter a number : 4
1
AB
123
ABCD
```

Input n = 4

Output:

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

Q5. Print the following pattern

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

```
PS C:\Users\ITC\OneDrive\Desktop\C++WITH DSA\PRACTICE
ve\Desktop\C++WITH DSA\PRACTICE c++with DSA\" ; if ($
gnmentprint2 } ; if ($?) { .\assignmentprint2 }
Enter a number :
4
*
**
***
****
***
**
*
```

Q6. Print the following pattern

Sample Input : m = 4, n = 6

Sample Output :

* *

* *

```
#include<iostream>
using namespace std;
int main(){
    int m,n;
    cout<<"Enter m : ";
    cin>>m;
    cout<<"Enter n : ";
    cin>>n;
    int t=m/2;
    int a=n;
    int p;
    for(int i=1;i<=t;i++){
        for(int j=1;j<=a;j++) cout<<"*";
        if(i==t){p=a;}
        a=a-m;
        cout<<endl;
    }
    for(int i=1;i<=t;i++){
        for(int j=1;j<=p;j++){
            cout<<"*";
        }
        p=p+m;
        cout<<endl;
    }
}
```

```

PS C:\Users\ITC\OneDrive\Desktop\C++WITH DSA\PRACT
ve\Desktop\C++WITH DSA\PRACTICE c++with DSA\" ; if
gmentprint2 } ; if ($?) { .\assignmentprint2 }
Enter m : 4
Enter n : 6
*****
**
**
*****

```

Q7. Print the following pattern

Sample Input : n = 4

Output :

```

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

```

```

#include <iostream>
using namespace std;
int main()
{
    int n;
    cout << "Enter a number : ";
    cin >> n;
    for (int i = 1; i <= n; i++)
    {
        for (int j = 1; j <= n; j++)
        {
            cout << "*";
        }
        cout << endl;
    }
}

```

Q8. 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 a number " << endl;
    cin >> n;
    for (int i = 1; i <= n; i++)
    {
        for (int j = 1; j <= i; j++)
        {
            cout << j;
        }
        cout << endl;
    }
}
```

```
PS C:\Users\ITC\OneDrive\Desktop\C++WITH DSA\PRA
ve\Desktop\C++WITH DSA\PRACTICE c++with DSA\" ;
gmentprint2 } ; if ($?) { .\assignmentprint2 }
Enter a number
4
1
1 2
1 2 3
1 2 3 4
```


Q9. 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 a number " << endl;
    cin >> n;
    for (int i = 1; i <= n; i++)
    {
        for (int j = 1; j <= i; j++)
        {
            cout << char(j + 64);
        }
        cout << endl;
    }
    return 0;
}
```

```
PS C:\Users\ITC\OneDrive\Desktop\C++WITH DSA\PRA
ve\Desktop\C++WITH DSA\PRACTICE c++with DSA\" ;
gmentprint2 } ; if ($?) { .\assignmentprint2 }
Enter a number
4
A
AB
ABC
ABCD
```

Q10. 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 a number : ";
    cin >> n;
    for (int i = 1; i <= n; i++)
    {
        for (int j = i; j > 0; j--)
        {
            cout << j;
        }
        cout << endl;
    }
}
```

```
PS C:\Users\ITC\OneDrive\Desktop\C++WITH DSA\PRAC
ve\Desktop\C++WITH DSA\PRACTICE c++with DSA\" ;
gmentprint2 } ; if ($?) { .\assignmentprint2 }
Enter a number : 4
1
2 1
3 2 1
4 3 2 1
```

Q11. Print the following pattern

Input: n = 4

Output:

*
**

**
*

```
#include<iostream>
using namespace std;
int main(){
    int n;
    cout<<"Enter a number : ";
    cin>>n;
    for(int i=1;i<=2*n-1;i++){
        if(i<=n){
            for(int j=1;j<=i;j++){
                cout<<"*";
            }
        }
        else {
            int t=i-n;
            for(int j=1;j<=n-t;j++){
                cout<<"*";
            }
        }
        cout<<endl;
    }
}
```

```
PS C:\Users\ITC\OneDrive\Desktop\C++WITH DSA\PR  
ve\Desktop\C++WITH DSA\PRACTICE c++with DSA\" ;  
gmentprint2 } ; if ($?) { .\assignmentprint2 }  
Enter a number : 4  
*  
**  
***  
****  
***  
**  
*
```