 Marwadi University	Marwadi University Faculty of Technology Department of Information and Communication Technology	
Sem : 5	Name :Pushti Depani	
Day : 13	Date : 30/10/2022	Enrollment No: 92000133018

CP Club 365Days Challenge

Date – 30/10/2022

Programming language – C++

Problem Statement

you have to do two pattern programs:

<p>Input: - 4 Output: -</p> <pre> 1 2*2 3*3*3 4*4*4*4 4*4*4*4 3*3*3 2*2 1 </pre>	<p>Input: - 4 Output: -</p> <pre> 1 2*3 4*5*6 7*8*9*10 7*8*9*10 4*5*6 2*3 1 </pre>
--	--

Your Code:

i)

```


#include <iostream>
using namespace std;
int main()
{

```

```

    int r,c,a,n;
    cout<<"Enter number of rows: ";

```


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```
cin >> n;
```

```
for(r=1;r<=n;r++)
```

```
{
    a=1;
    for(c=0;c<r;c++)
    {
        cout << r;
        if(a<r)
        {
            cout << "*";
            a=a+1;
        }
    }
    cout << endl;
```

```
}
for(r=n;r>0;r--)
{
    a=1;
    for(c=0;c<r;c++)
    {
        cout << r;
        if(a<r)
        {
            cout << "*";
            a=a+1;
        }
    }
    cout << endl;
}
```

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return 0;

}

ii)

```
#include <iostream>
```

```
using namespace std;
```

```
int main()
```

```
{
```

```
    int r,c,a=1,n;
```

```
    cout << "Enter a number of Rows: ";
```

```
    cin >> n;
```

```
    for(r=1;r<=n;r++)
```

```
    {
```

```
        for(c=1;c<=r;c++)
```

```
        {
```

```
            if(c<r){
```

```
                cout << a++ << "*";
```

```
            }
```

```
            else{
```

```
                cout << a++;
```

```
            }
```

```
        }
```

```
        cout << endl;
```

```
    }
```

```
    a=a-n;
```

```
    for(r=n;r>=1;r--)
```


```
    {
```

```
        for(c=1;c<=r;c++)
```

```
        {
```

```
            if(c<r){
```

```
                cout << a++ << "*";
```

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```

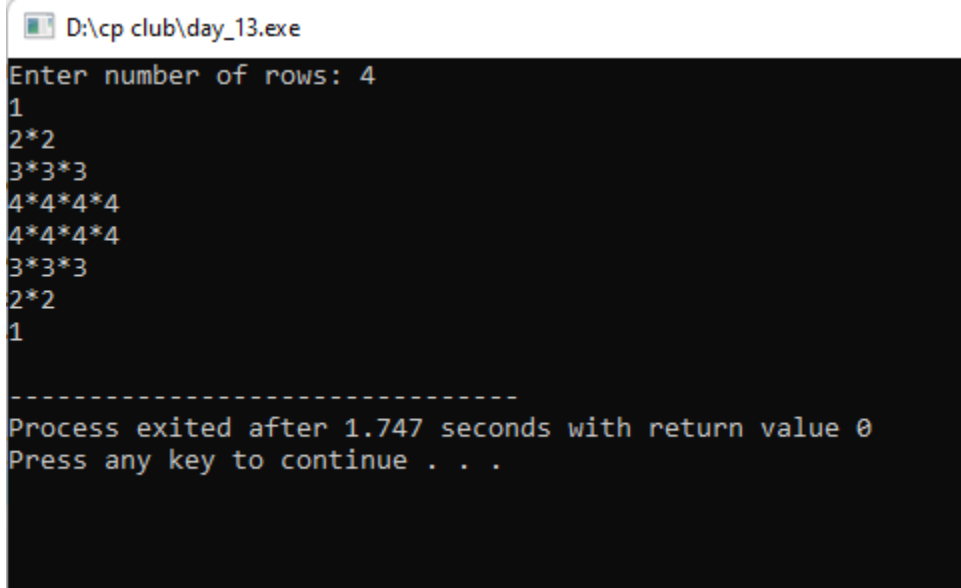
    }
    else{
        cout << a++;
    }
}
a=(a+1)-2*r;
cout << endl;
}
return 0;

}

```

Output (Screen Shot):

i)




```

D:\cp club\day_13.exe
Enter number of rows: 4
1
2*2
3*3*3
4*4*4*4
4*4*4*4
3*3*3
2*2
1

-----
Process exited after 1.747 seconds with return value 0
Press any key to continue . . .

```

ii)

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```

D:\cp club\day_13_2.exe
Enter a number of Rows: 4
1
2*3
4*5*6
7*8*9*10
7*8*9*10
4*5*6
2*3
1
-----
Process exited after 3.046 seconds with return value 0
Press any key to continue . . .

```

Understanding about problem:

From this experiment I have learned about how to create simple pattern using for and if condition. Moreover Pattern programs gives the working of looping structures in general purpose programming languages. Its helps user to visualize how every iteration in a loop works.

Note: If you can't understand the problem, feel free to contact us and we'll help you. Please don't copy and paste from anywhere.

ALL THE BEST

Team CP Club