

1dsa

//Q1

```
#include<iostream>
```

```
using namespace std;
```

```
int main(){
```

```
    for(int i=1;i<=6;i++){
```

```
        if(i==1 || i==6){
```

```
            for(int j=1;j<=5;j++){
```

```
                cout<<"* ";
```

```
            }
```

```
            cout<<"\n";
```

```
        }
```

```
    else{
```

```
        for(int j=1;j<=5;j++){
```

```
            if(j==1 || j==5){
```

```
                cout<<"* ";
```

```
            }
```

```
        else{
```

```
            cout<<" ";
```

```
        }
```

```
    }
```

```
    cout<<"\n";
```

```
    }
```

```
}
```

```
    return 0;
```

```
}
```

//Q2

```
#include<iostream>
```

```
using namespace std;
```

```
int main(){
```

```
    int a=1;
```

```

    for(int i=1;i<=4;i++){
        for(int j=1;j<=i;j++){
            cout<<a<<" ";

            a++;
        }
        cout<<"\n";
    }
    return 0;
}

```

//Q3

```

#include<iostream>
using namespace std;
int main(){
    for(int i=1;i<=4;i++){
        for(int j=1;j<=4-i;j++){
            cout<<" ";
        }
        for(int j=1;j<=i;j++){
            if(j==1 || j==i){
                cout<<"1 ";
            }
            else{
                cout<<i-1<<" ";
            }
        }
        cout<<"\n";
    }
    return 0;
}

```

//Q4

```
#include<iostream>
```

```
using namespace std;
```

```
int main(){
```

```
    for(int i=1;i<=5;i++){
```

```
        char ch='A';
```

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

```
            cout<<ch<<" ";
```

```
            ch++;
```

```
        }
```

```
        cout<<"\n";
```

```
    }
```

```
    return 0;
```

```
}
```

//Q5

```
#include<iostream>
```

```
using namespace std;
```

```
int main(){
```

```
    int k=0;
```

```
    for(int i=1;i<=5;i++){
```

```
        //spaces
```

```
        for(int j=1;j<=5-i;j++){
```

```
            cout<<" ";
```

```
        }
```

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

```
            //cout<<j<<" ";
```

```
            cout<<"* ";
```

```
        }
```

```
        k++;
```

```
        cout<<"\n";
```

```
    }
```

```
        return 0;
    }
}
```

//Q6

```
#include<iostream>

using namespace std;

int main(){
    int k=0;
    for(int i=1;i<=5;i++){
        for(int j=1;j<=5-i;j++){
            cout<<" ";
        }
        for(int j=1;j<=i+k;j++){
            cout<<j<<" ";
        }
        cout<<"\n";
        k++;
    }
    return 0;
}
```

//Q7

```
#include<iostream>

using namespace std;

int main(){
    int k=0;
    for(int i=1;i<=5;i++){
        for(int j=1;j<=5-i;j++){
            cout<<" ";
        }
        char ch ='A';
        for(int j=1;j<=i+k;j++){
```

```
        cout<<ch<<" ";
        ch++;
    }
    k++;
    cout<<"\n";
}
return 0;
}
```