

1.

```
#include <iostream>
#include <stdio.h>
#include <stdlib.h>
#include <math.h>
using namespace std;

int main() {
    int a = 1, x = 10;
    printf("    ");
    for (int i = a; i <= x; i++) {
        printf("%4d", i);
    }
    for (int i = a; i <= x; i++) {
        printf("\n");
        printf("%4d", i);
        for (int j = a; j <= x; j++) {
            printf("%4d", i * j);
        }
    }
    return 0;
}
```

2.

```
#include <stdlib.h>
#include <math.h>
using namespace std;

int main() {
    int x = 4;
    for (int i = 1;i <= x;i++) {
        for (int j = 1;j <= x;j++) {
            cout << char(219) << char(219) << "  ";
        }
        cout << "\n";
        for (int j = 1;j <= x;j++) {
            cout << "  " << char(219) << char(219);
        }
        cout << "\n";
    }
}
```

3.

```
#include <iostream>
#include <stdio.h>
#include <stdlib.h>
#include <math.h>
using namespace std;

int main() {
    int x;
    char a, b;
    cout << "Zadaj promjer dijamantu (mora biti neparan broj veci od 1) :";
    cin >> x;
    cout << "Zadaj okvirni znak: ";
    cin >> a;
    cout << "Zadaj unutrasnji znak: ";
    cin >> b;
    int sredina = x / 2;
    cout << "\n";
    for (int i = 0; i <= sredina; i++) {
        for (int j = 0; j < sredina - i;j++)
            cout << " ";
        cout << a;
        if (i > 0) {
            for (int j = 0;j < 2 * i - 1;j++)
                cout << b;
            cout << a;
        }
        cout << "\n";
    }
    for (int i = sredina-1; i >= 0; i--) {
        for (int j = 0; j < sredina - i;j++)
            cout << " ";
        cout << a;
        if (i > 0) {
            for (int j = 0;j < 2 * i - 1;j++)
                cout << b;
            cout << a;
        }
        cout << "\n";
    }
    return 0;
}
```

4.

```
#include <iostream>
#include <stdio.h>
#include <stdlib.h>
#include <math.h>
using namespace std;

int main() {
    int a, b, c;

    for (a = 1;a <= 12;a++) {
        for (b = 1;b <= 12;b++) {
            for (c = 1;c <= 16;c++) {
                if (c * c == a * a + b * b) {
                    printf("a = %2d  b = %2d  c = %2d\n", a, b, c);
                    printf("-----\n");
                }
            }
        }
    }
    return 0;
}
```