* 1. **Nested loops:**

Nested loops are loops within loops

**Syntax:**

for (int i=0; condition; increment) {

for (int i=0; condition; increment) {

statement(s);

}

}

**Stars Printing:**

#include<iostream>

#include<conio.h>

#include<iomanip>

using namespace std;

int main()

{

int i, j;

for (i = 1; i <= 5; i++)

{

cout << "\n";

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

cout << " \* ";

}

\_getch();

return 0;

}

A group of white stars on a black background

Description automatically generated

#include<iostream>

#include<conio.h>

#include<iomanip>

using namespace std;

int main()

{

int a, b;

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

{

for (int j = 5; j >= i; j--)

{

cout << " \* ";

}

cout << endl;

}

\_getch();

return 0;

}

A group of white snowflakes on a black background

Description automatically generated

#include<iostream>

#include<conio.h>

#include<iomanip>

using namespace std;

int main()

{

int i, j,k;

for (i = 1; i <=5; i++)

{

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

cout << " ";

for (k = 5; k >= i; k--)

cout << " \*";

cout << endl;

}

\_getch();

return 0;

}

#include<iostream>

#include<conio.h>

#include<iomanip>

using namespace std;

int main()

{

int i, j;

cout << "\n";

for (i = 6; i >= 1; i--)

{

for (j = i; j <= 5; j++)

{

cout << " ";

}

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

{

cout << " \*";

}

// ending line after each row

cout << "\n";

}

\_getch();

return 0;

}

A group of white snowflakes on a black background

Description automatically generated A black background with white snowflakes

Description automatically generated

#include<iostream>

#include<conio.h>

#include<iomanip>

using namespace std;

int main()

{

int i, j,k;

cout << endl;

for (i = 5; i >=1; i--)

{

for (j = 1; j < 4\*i; j++)

cout << " ";

for (k = 6; k > i; k--)

cout << " \* ";

cout << endl;

}

\_getch();

return 0;

}

#include<iostream>

#include<conio.h>

#include<iomanip>

using namespace std;

int main()

{

int i, j;

cout << "\n";

for (i = 1; i <= 5; i++)

{

for (j = i; j < 5; j++)

{

cout << " ";

}

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

{

cout << " \*";

}

cout << "\n";

}

\_getch();

return 0;

}

A black background with white snowflakes

Description automatically generated A group of white snowflakes on a black background

Description automatically generated

#include<iostream>

#include<conio.h>

using namespace std;

int main()

{

int i, j;

for (i = 1; i <= 4; i++)

{

cout << "\n";

for (j = 1; j <= 10; j++)

cout << "\*";

}

\_getch();

return 0;

}

A row of white snowflakes

Description automatically generated

#include<iostream>

#include<conio.h>

using namespace std;

int main()

{

int i, j;

for (i = 1; i <= 4; i++)

{

for (j = 1; j <= 10; j++)

cout << "\*\n";

}

\_getch();

return 0;

}

**Output:**

**7)**

#include<iostream>

#include<conio.h>

using namespace std;

int main()

{

int i, j;

for (i = 1; i <= 4; i++)

{

for (j = 1; j <= 10; j++)

cout << "\*";

}

\_getch();

return 0;

}



#include<iostream>

#include<conio.h>

#include<iomanip>

using namespace std;

int main()

{

int i, j,k;

for (i = 1; i <= 5; i++)

{

for (j = 5; j > i; j--)

cout << " ";

for (k= 2; k <=2\*i; k++)

cout << "\*";

cout << endl;

}

\_getch();

return 0;

}

A black background with white snowflakes

Description automatically generated

#include<iostream>

#include<conio.h>

#include<iomanip>

using namespace std;

int main()

{

int s, i, j;

for (i = 5; i >= 1; i--)

{

for (s = i; s < 5; s++)

cout << " ";

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

cout << "\* ";

cout << "\n";

}

\_getch();

return 0;

}

A black background with white snowflakes

Description automatically generated

#include<iostream>

#include<conio.h>

#include<iomanip>

using namespace std;

int main()

{

int i, j;

for (i = 1; i <= 5; i++)

{

cout << "\n";

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

cout << " \* ";

}

for (i = 1; i <= 4; i++)

{

cout << "\n";

for (j = 4; j >= i; j--)

cout << " \* ";

}

\_getch();

return 0;

}

A black background with white snowflakes

Description automatically generated

#include<iostream>

#include<conio.h>

#include<iomanip>

using namespace std;

int main()

{

int i, j;

cout << "\n";

for (i = 1; i <= 5; i++)

{

for (j = i; j < 5; j++)

{

cout << " ";

}

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

{

cout << " \*";

}

cout << "\n";

}

for (i = 5; i >= 1; i--)

{

for (j = i; j <= 5; j++)

{

cout << " ";

}

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

{

cout << " \*";

}

// ending line after each row

cout << "\n";

}

\_getch();

return 0;

}

A group of white snowflakes on a black background

Description automatically generated

#include<iostream>

#include<conio.h>

#include<iomanip>

using namespace std;

int main()

{

int i, j;

for (i = 1; i <= 6; i++)

{

for (j = i; j < 6; j++)

{

cout << " ";

}

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

{

cout << "\* ";

}

cout << "\n";

}

for (i = 6; i >= 1; i--)

{

for (j = i; j <= 6; j++)

{

cout << " ";

}

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

{

cout << "\* ";

}

// ending line after each row

cout << "\n";

}

\_getch();

return 0;

}

A black background with white snowflakes

Description automatically generated

#include<iostream>

#include<conio.h>

#include<iomanip>

using namespace std;

int main()

{

int r, i, j, s;

cout << "Enter number of rows: ";

cin >> r;

for (i = 1; i <= r; i++)

{

//for loop to put space in pyramid

for (s = i; s < r; s++)

cout << " ";

//for loop to print star

for (j = 1; j <= (2 \* r - 1); j++)

{

if (i == r || j == 1 || j == 2 \* i - 1)

cout << "\*";

else

cout << " ";

}

//ending line after each row

cout << "\n";

}

\_getch();

return 0;

}

#include<iostream>

#include<conio.h>

#include<iomanip>

using namespace std;

int main()

{

int r, i, j, s;

cout << "Enter number of rows: ";

cin >> r;

for (i = r; i >= 1; i--)

{

//for loop to put space in pyramid

for (s = i; s < r; s++)

cout << " ";

//for loop to print star in pyramid

for (j = 1; j <= 2 \* i - 1; j++)

{

if (i == r || j == 1 || j == 2 \* i - 1)

cout << "\*";

else

cout << " ";

}

cout << "\n";

}

\_getch();

return 0;

}

#include<iostream>

#include<conio.h>

using namespace std;

int main()

{

int a, b;

for (a = 1; a <= 5; a++)

{

for (b = 1; b <= a; b++)

{

cout << a << " ";

}

cout << endl;

}

\_getch();

return 0;

}

#include<iostream>

#include<conio.h>

using namespace std;

int main()

{

int a, b;

for (a = 1; a <= 5; a++)

{

for (b = 5; b >= a; b--)

{

cout << a << " ";

}

cout << endl;

}

\_getch();

return 0;

}

A screenshot of a computer

Description automatically generated

#include<iostream>

#include<conio.h>

using namespace std;

int main()

{

int a, b;

for (a = 1; a <= 5; a++)

{

for (b = 1; b <= a; b++)

{

cout << b << " ";

}

cout << endl;

}

\_getch();

return 0;

}

A screenshot of a computer

Description automatically generated

#include<iostream>

#include<conio.h>

using namespace std;

int main()

{

int a, b;

for (a = 5; a >= 1; a--)

{

for (b = 1; b <= a; b++)

{

cout << b << " ";

}

cout << endl;

}

\_getch();

return 0;

}

**Output:**

A screenshot of a computer

Description automatically generated