**C++ Programs**

#include <iostream>

using namespace std;

int main()

{

float n1, n2, n3;

cout << "Enter three numbers: ";

cin >> n1 >> n2 >> n3;

if(n1 >= n2 && n1 >= n3)

{

cout << "Largest number: " << n1;

}

if(n2 >= n1 && n2 >= n3)

{

cout << "Largest number: " << n2;

}

if(n3 >= n1 && n3 >= n2) {

cout << "Largest number: " << n3;

}

return 0;

}

\*Loops

#include <iostream>

using namespace std;

int main()

{

int i, n, factorial = 1;

int j=1;

int num=1;

int n1=5;

cout << "FOR:\n";

cout << "Enter a positive integer: ";

cin >> n;

for (i = 1; i <= n; ++i) {

factorial \*= i;

}

cout<< "Factorial of "<<n<<" = "<<factorial;

cout << "\n\nWHILE:";

while (j < 3) {

cout << "\nHello World";

j++;

}

cout << "\n\nDO-WHILE:\n";

do{

cout<<"Value of num: "<<num<<endl;

num++;

}while(num<=6);

cout << "\nSWITCH CASE\n";

switch(n1+2) {

case 1:

cout<<"Case1: Value is: "<<n1<<endl;

case 2:

cout<<"Case2: Value is: "<<n1<<endl;

case 3:

cout<<"Case3: Value is: "<<n1<<endl;

default:

cout<<"Default: Value is: "<<n1<<endl;

}

return 0;

}

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#include <iostream>

using namespace std;

int main()

{

int rows;

cout << "Enter number of rows: ";

cin >> rows;

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

{

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

{

cout << "\* ";

}

cout << "\n";

}

return 0;

}

1

1 2

1 2 3

1 2 3 4

1 2 3 4 5

#include <iostream>

using namespace std;

int main()

{

int rows;

cout << "Enter number of rows: ";

cin >> rows;

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

{

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

{

cout << j << " ";

}

cout << "\n";

}

return 0;

}

A

B B

C C C

D D D D

E E E E E

#include <iostream>

using namespace std;

int main()

{

char input, alphabet = 'A';

cout << "Enter the uppercase character you want to print in the last row:

";

cin >> input;

for(int i = 1; i <= (input-'A'+1); ++i)

{

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

{

cout << alphabet << " ";

}

++alphabet;

cout << endl;

}

return 0;

}

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#include <iostream>

using namespace std;

int main()

{

int rows;

cout << "Enter number of rows: ";

cin >> rows;

for(int i = rows; i >= 1; --i)

{

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

{

cout << "\* ";

}

cout << endl;

}return 0;

}

1 2 3 4 5

1 2 3 4

1 2 3

1 2

1

#include <iostream>

using namespace std;

int main()

{

int rows;

cout << "Enter number of rows: ";

cin >> rows;

for(int i = rows; i >= 1; --i)

{

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

{

cout << j << " ";

}

cout << endl;

}

return 0;

}

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#include <iostream>

using namespace std;

int main()

{

int space, rows;

cout <<"Enter number of rows: ";

cin >> rows;

for(int i = 1, k = 0; i <= rows; ++i, k = 0)

{

for(space = 1; space <= rows-i; ++space)

{

cout <<" ";

}

while(k != 2\*i-1)

{

cout << "\* ";

++k;

}

cout << endl;

}

return 0;

}

1

2 3 2

3 4 5 4 3

4 5 6 7 6 5 4

5 6 7 8 9 8 7 6 5

#include <iostream>

using namespace std;

int main()

{

int rows, count = 0, count1 = 0, k = 0;

cout << "Enter number of rows: ";

cin >> rows;

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

{

for(int space = 1; space <= rows-i; ++space)

{

cout << " ";

++count;

}

while(k != 2\*i-1)

{

if (count <= rows-1)

{

cout << i+k << " ";

++count;

}

else

{

++count1;

cout << i+k-2\*count1 << " ";

}

++k;

}

count1 = count = k = 0;

cout << endl;

}

return 0;

}

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#include <iostream>

using namespace std;

int main()

{

int rows;

cout << "Enter number of rows: ";

cin >> rows;

for(int i = rows; i >= 1; --i)

{

for(int space = 0; space < rows-i; ++space)

cout << " ";

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

cout << "\* ";

for(int j = 0; j < i-1; ++j)

cout << "\* ";

cout << endl;

}

return 0;

}

1

2 3

4 5 6

7 8 9 10

#include <iostream>

using namespace std;

int main()

{

int rows, number = 1;

cout << "Enter number of rows: ";

cin >> rows;

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

{

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

{

cout << number << " ";

++number;

}

cout << endl;

}

return 0;

}

**\*Use of function**

#include <iostream>

using namespace std;

int add(int, int);

int main()

{

int num1, num2, sum;

cout<<"Enters two numbers to add: ";

cin >> num1 >> num2;

sum = add(num1, num2);

cout << "Sum = " << sum;

return 0;

}

int add(int a, int b)

{

int add;

add = a + b;

return add;

}

**\*Implementation of array**

#include <iostream>

using namespace std;

int main()

{

int numbers[5], sum = 0;

cout << "Enter 5 numbers: ";

for (int i = 0; i < 5; ++i)

{

cin >> numbers[i];

sum += numbers[i];

}

cout << "Sum = " << sum << endl;

return 0;

}

**\*Implementation of pointer**

#include <iostream>

using namespace std;

int main()

{

int var1 = 3;

int var2 = 24;

int var3 = 17;

cout << &var1 << endl;

cout << &var2 << endl;

cout << &var3 << endl;

}

**\*File management**

#include <iostream>

#include <fstream>

using namespace std;

int main()

{

fstream new\_file;

new\_file.open("new\_file\_write.txt", ios::out);

if (!new\_file)

{

cout << "File creation failed";

}

else

{

cout << "New file created";

new\_file << "Learning File handling";

new\_file.close();

}

return 0;

}