#include <cmath>

#include <stdio.h>

using namespace std;

int main()

{

// 1.X4 i = n pa sve do 2n sumira izraz 2^abs(i-2) , n>=0

int n = 0;

int sum = 0;

do

{

cout << "Unesite n: ";

cin >> n;

if (n < 0)

cout << "n ne smije biti manji od 0.\n";

} while (n < 0);

for (int i = n; i <= 2 \* n; i++)

sum += pow(2, abs(i - 2));

cout << "Rezultat formule je: " << sum;

}

#include <iostream>

#include <cmath>

#include <stdio.h>

using namespace std;

int main()

{

int sum1 = 0, sum2=0;

//sum1 - ide od -10 pa do 10

for (int i = -10; i <= 10; i++)

sum1 += (i \* i);

//sum2 - ide od -5 pa do 5 ce se poništit

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

sum2 += i;

cout << "Rezultat formule je: " << (1 / sqrt(5)) \* (sum1 - sum2) << endl;

cout << "Rezultat formule je: " << (sum1 - sum2) << endl;

}

#include <iostream>

#include <cmath>

#include <stdio.h>

using namespace std;

// 1X7

int main()

{

int n = 0;

int sum1 = 0 ,sum2 =0;

int i = 0, j = 0;

//1 <= n < 16

do

{

cout << "Unesite n: ";

cin >> n;

if ((n >= 16) || (n < 1))

cout << "Pogresan unos. \n";

} while ((n>=16)||(n<1));

for (int i = 1; i <= 16; i++)

{

for (int j = 5; j <= 10; j++)

{

sum2 += (((i-j)\*(i-j))/(j\*j));

}

sum1 = i \* i + sum2;

}

cout << "Rezultat formule je: " << sum1;

}

#include <iostream>

#include <cmath>

#include <stdio.h>

using namespace std;

// 1X8

int main()

{

int n=0;

double pro = 1;

//1 <= n < 16

do

{

cout << "Unesite n: ";

cin >> n;

if ((n > 10) || (n < 1))

cout << "Pogresan unos. \n";

} while ((n>10)||(n<1));

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

{

pro \*= pow(i + 1, -1);

}

cout << "Rezultat formule je: " << pro;

}

#include <iostream>

#include <cmath>

#include <stdio.h>

using namespace std;

// 1X6

int main()

{

int n = 0;

int sum1 = 0, sum2=0;

int i = 0, j = 0;

do

{

cout << "Unesite n: ";

cin >> n;

if (n <= 5)

cout << "Pogresan unos. \n";

} while (n <= 5);

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

{

for (j = 5; j <= 10; j++)

{

sum2 += ((i \* i \* j) - (i \* j \* j));

}

sum1 += sum2;

}

cout << "Rezultat formule je: " << sum1;

}

#include <iostream>

#include <cmath>

#include <stdio.h>

using namespace std;

// 1X9

int main()

{

double pro = 1, sum=0;

int i = 0, j = 0;

for (int i = 1; i <= 10; i++)

{

for (int j = -5; j <= 5; j++)

sum += ((i - 1) \* (1 - j));

pro \*= sum;

}

cout << "Rezultat formule je: " << pro;

}

#include <iostream>

#include <cmath>

#include <stdio.h>

using namespace std;

// 1X10

int main()

{

for (int u1 = 0; u1<= 1; u1++)

for (int u2 = 0; u2 <= 1; u2++)

for (int u3 = 0; u3 <= 1; u3++)

cout << u1 << " " << u2 << " " << u3 << " (AND) " << u1 \* u2 \* u3 << endl;

}

#include <iostream>

#include <cmath>

#include <stdio.h>

using namespace std;

// 1X11

int main()

{

for (int u1 = 0; u1<= 1; u1++)

for (int u2 = 0; u2 <= 1; u2++)

for (int u3 = 0; u3 <= 1; u3++)

cout << u1 << " " << u2 << " " << u3 << " (NOR) " << !(u1 + u2 + u3) << endl;

}

//ZADATAK 1.X12

#include <iostream>

#include <cmath>

#include <stdio.h>

using namespace std;

int main()

{

for (int u1 = 0; u1 <= 1; u1++)

{

for (int u2 = 0; u2 <= 1; u2++)

{

for (int u3 = 0; u3 <= 1; u3++)

{

cout << u1 << " " << u2 << " " << u3 << " (OPERACIJA) " << !(u1 + u2) \* u3 << endl;

}

}

}

system("pause>0");

return 0;

}

#include <iostream>

#include <cmath>

#include <stdio.h>

using namespace std;

// 1X11

int main()

{

int rez = 0;

for (int u1 = 0; u1<= 1; u1++)

for (int u2 = 0; u2 <= 1; u2++)

for (int u3 = 0; u3 <= 1; u3++)

{

cout << u1 << " " << u2 << " " << u3 << " (operacija) " << !(u1 + u2) \* u3;

cout << endl;

}

}

#include <iostream>

#include <cmath>

#include <stdio.h>

using namespace std;

// 1X12

int main()

{

bool rez;

for (int u1 = 0; u1<= 1; u1++)

for (int u2 = 0; u2 <= 1; u2++)

for (int u3 = 0; u3 <= 1; u3++)

{

rez = !(u1 || u2) && u3;

cout << u1 << " " << u2 << " " << u3 << " (operacija) " << rez;

cout << endl;

}

}

#include <iostream>

#include <cmath>

#include <stdio.h>

using namespace std;

// 1X13 OPERACIJA U C++ ZA XOR IZ BITWISE SKUPA OPERACIJA JE " ^ "

int main()

{

bool rez;

for (int u1 = 0; u1<= 1; u1++)

for (int u2 = 0; u2 <= 1; u2++)

for (int u3 = 0; u3 <= 1; u3++)

{

rez = u1 ^ u2 ^ u3;

cout << u1 << " " << u2 << " " << u3 << " (XOR) " << rez;

cout << endl;

}

}

#include <iostream>

#include <cmath>

#include <stdio.h>

using namespace std;

// 1X14

int main()

{

char c;

do

{

cout << "Unesite karakter: ";

cin >> c;

} while ((c <= 'A') || ((c > 'Z') && (c <= 'a')) || (c > 'z') ||

(c=='e') || (c == 'i') || (c == 'o') || (c == 'u') || (c == 'E') || (c == 'I') || (c == 'O') || (c == 'U'));

if (c == 'Z') cout << 'Y' << " " << 'Z' << "" << 'A';

else if (c == 'z') cout << 'y' << " " << 'z' << " " << 'a';

else cout << (char)(c - 1) << " " << c << " " << (char)(c + 1);

}

#include <iostream>

#include <cmath>

#include <stdio.h>

using namespace std;

// 1X15

// a b c d ... z

int main()

{

int index = 0;

/\*

for (char c = 'a'; c <= 'z'; c++)

{

if (index % 2 == 0)

cout << c << ", ";

index++;

}

\*/

for (char c = 'a'; c <= 'z'; c=c + 2)

cout << c << ", ";

}

#include <iostream>

using namespace std;

// 1X16

// a b c d ... z

int main()

{

char c;

int n=0;

int br = 0;

do

{

cout << "Unesite slovo: ";

cin >> c;

} while ((c < 'A') || (c > 'z') || ((c > 'Z') && (c < 'a')));

do

{

cout << "Unesite pomak: ";

cin >> n;

} while (n <= 0);

n = n % 26;

if (c >= 'A' && c <= 'Z')

{

for (char x = c; br < n; c++)

{

if (c + br > 'Z')

c = 'A';

br++;

}

}

else

{

for (char x = c; br < n; c++)

{

if (c + br > 'z')

c = 'a';

br++;

}

}

cout << "Rezultat: " << c;

}

#include <iostream>

using namespace std;

// 1X17

int main()

{

int n = 0;

int temp\_main = 0, temp=0;

int sum = 0, pro = 1;

do

{

cout << "Unesite broj izmedju 10 i 99: ";

cin >> n;

} while ((n < 10) || (n > 99));

for (int i = 10; i <= n; i++)

{

temp\_main = i;

sum = 0;

pro = 1;

while (temp\_main!=0)

{

temp = temp\_main % 10;

temp\_main /= 10;

sum += temp;

pro \*= temp;

}

if (pro > sum) cout << i << ", ";

}

}

#include <iostream>

using namespace std;

// 1X18

int main()

{

int n = 0;

do

{

cout << "Unesite broj izmedju 10 i 99: ";

cin >> n;

} while ((n < 10));

for (int i = 10; i <= n; i++)

if ((i % 100 == 33) && (i%3==0))

cout << i << ", ";

}

#include <iostream>

using namespace std;

// 1X19

int main()

{

int dd=0, MM=0, yy=0;

bool leap;

bool tacan=1;

cout << "Unesite dane: ";

cin >> dd;

cout << "Unesite mjesec: ";

cin >> MM;

cout << "Unesite godine: ";

cin >> yy;

switch (MM)

{

case 2:

leap = ((yy % 4 == 0) && (yy % 100 != 0)) || (yy % 400 == 0);

if ((leap == true) && ((dd < 0) || (dd > 29))) tacan = false;

else if ((leap == false) && ((dd < 0) || (dd > 28))) tacan = false;

break;

case 1:

case 3:

case 5:

case 7:

case 8:

case 10:

case 12:

if (dd < 0 || dd > 31) tacan = false;

break;

case 4:

case 6:

case 9:

case 11:

if (dd < 0 || dd > 30) tacan = false;

break;

default:

cout << "Niste unijeli validan mjesec";

tacan == false;

}

if (tacan == false) cout << "Nije validan";

else cout << "Validan";

}